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ABSTRACT

    Conducted as part of the UCLA Allied Health Professions Project, this report summarizes a functional analysis of occupational groups employed by physicians in providing out-of-hospital services to patients. To provide data for developing and improving instructional materials, a task inventory was developed to determine which categories of workers assist physicians and what tasks are delegated to them. The inventory encompassed two broad categories, including: (1) 124 tasks related to administrative functions, and (2) 108 tasks classified as clinical and technical activities. Responses from 292 registered and licensed nurses, medical office assistants (technical and generalist), and administrative and clerical personnel revealed that: (1) Physician's employees are utilized in numerous capacities regardless of background, training, or job title; (2) Although employees perform both administrative and clinical or technical functions, the frequencies of certain tasks differ depending upon job title; and (3) Curriculums for training physician's employees should be designed in modular or submodular form according to function. The survey questionnaire and other study materials are appended. (SB)

THE UCLA ALLIED HEALTH PROFESSIONS PROJECT

Occupational Analysis

MEDICAL OFFICE ASSISTANT

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UNIVERSITY OF CALIFORNIA, LOS ANGELES
Division of Vocational Education

ALLIED HEALTH PROFESSIONS PROJECT

— — — — — — — — — — — EXECUTIVE RESEARCH AND DESIGN GROUP — — — — — — — — — — —
(EXECUTIVE COMMITTEE)

Melvin L. Barlow, Professor of Education, *Chairman*
Director, Division of Vocational Education
University of California, Los Angeles

David Allen, Coordinator
Professional Resources Development Unit
Bureau of Industrial Education
State Department of Education

Miles H. Anderson, Acting Director
Allied Health Professions Project
Division of Vocational Education
University of California, Los Angeles

B. Lamar Johnson, Professor of Education
University of California, Los Angeles

Richard S. Nelson, Chief
Program Operations—Vocational Education
Bureau of Industrial Education
State Department of Education

Bernard R. Strohm
Assistant Director of Hospitals and Clinics
University of California, Los Angeles

— — — — — — — — — — — — — — — — — — STAFF — — — — — — — — — — — — — — — — — — —

Melvin L. Barlow, Ed.D.   Principal Investigator and
                               Project Director

Miles H. Anderson, Ed.D.   Acting Director

Thomas E. Freeland, Ph.D.   Deputy Director

Carol Tripp   Project Coordinating Assistant

Mary Ellison   Editors
Sylva Grossman
Seba Kolb

1003 Wilshire Boulevard, Santa Monica, California 90401   (213) 393-9281

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THE UCLA ALLIED HEALTH PROFESSIONS PROJECT

OCCUPATIONAL ANALYSIS
MEDICAL OFFICE ASSISTANT

Medical Office Assistant
(OE 07.0904   DOT 079.368-022, 201.368-014)

O. EARL DiCICCO, B.S.

UNIVERISTY OF CALIFORNIA, LOS ANGELES
Division of Vocational Education
Allied Health Professions Project

December 1971

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FOREWORD

The Division of Vocational Education, University of California, is an administrative unit of the University which is concerned with research, teacher education, and public service in the broad area of vocational and technical education. During 1968 the Division entered into an agreement with the U.S. Office of Education to prepare curricula and instructional materials for a variety of allied health occupations. Such materials are related to pre-service and in-service instruction for programs ranging from on-the-job training through the Associate degree level.

A National Advisory Committee, drawn from government, education, professional associations in the health care field, and the lay public, provides guidance and help in the activities of the Allied Health Professions Project. The following individuals and institutions participate in the activities of this nationwide interdisciplinary body:

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Vice President, The Times Mirror Company
Los Angeles, California

Lowell Burkett, Executive Director
American Vocational Association
Washington, D.C.

L.M. Detmer, Director
Bureau of Health Manpower and Education
American Hospital Association, Chicago, Illinois

Dale Garell, M.D.
Children's Hospital
Los Angeles, California

John F. Henning, Executive Secretary-Treasurer
California Federation of Labor
San Francisco, California

Joseph Kadish, Ph.D., Acting Chief
Education Program Development Branch
National Institutes of Health, Washington, D.C.

Bernard F. Kamins
Public Relations Consultant
Beverly Hills, California

iii

Ralph C. Kuhli, Director
Department of Allied Medical Professions and Services
American Medical Association, Chicago, Illinois

Leon Lewis, Chief
Division of Occupational Analysis and Employer Services
Manpower Administration, Department of Labor, Washington, D.C.

Walter J. McNerney, President
Blue Cross Association
Chicago, Illinois

Peter G. Meek, Executive Director
National Health Council
New York, New York

Mark J. Musser, M.D., Chief Medical Director
Department of Medicine and Surgery
Veterans Administration, Washington, D.C.

Leroy Pesch, M.D., Deputy Assistant Secretary for Health Manpower
Department of Health, Education, and Welfare
Washington, D.C.

Helen K. Powers, Education Program Specialist
Health Occupations Education
U.S. Office of Education, Washington, D.C.

William M. Samuels, Executive Director
Association of Schools of Allied Health Professions
Washington, D.C.

Dr. William Shannon, Acting Associate Executive Director
American Association of Junior Colleges
Washington, D.C.

Elizabeth Simpson, Ph.D.
Bureau of Research, U.S. Office of Education
Washington, D.C.

John D. Twiname, Commissioner, Social and Rehabilitation Service
Department of Health, Education, and Welfare
Washington, D.C.

C. Gordon Watson, D.D.S., Executive Director
American Dental Association
Chicago, Illinois

Richard S. Wilbur, M.D., Assistant Secretary of Defense
Department of Defense
Washington, D.C.

This report summarizes a functional analysis of occupational groups employed by physicians in providing out-of-hospital services to patients. The analysis is based upon a survey made to identify performance of tasks by the various occupational categories of physicians' non-doctor employees throughout the nation.

Melvin L. Barlow, Director
Division of Vocational Education
University of California

Professor of Education, UCLA

Principal Investigator
Allied Health Professions Project

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Pasadena City College
Pasadena, California

Mary E. Kinn, CPS — Instructor
Medical Assisting Program
Long Beach City College
Long Beach, California

Mary J. Michaels, CMA — Vice President
AAMA Committee on Education
Morgantown, North Carolina

Eloise Hansen — Executive Head, Medical Assisting Department
De Anza Junior College
Los Altos Hills, California
Chairman, California Community College
Medical Assisting Curriculum Committee

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SUMMARY

Objectives of the Study

1. To conduct a comprehensive national survey of the types of tasks performed by workers who assist physicians in a number of settings. These workers are supervised by physicians and perform various administrative and/or clinical duties which are delegated on the basis of specific training and performed in accordance with the state laws governing such occupations.

2. To determine which categories of workers assist physicians, and what specific tasks are delegated to them.

3. To consolidate (a) clinical and technical job titles, and (b) administrative, clerical and secretarial titles, and to relate the consolidated groups to the tasks being performed.

4. To establish levels of training for an upward mobility program for physicians' employees.

5. To construct a new curriculum or improve existing curricula on the basis of tasks performed (as indicated by the national survey), with advice and general guidelines provided by a National Technical Advisory Committee (to be selected for medical assisting occupations).

6. To establish the dividing line between administrative and clinical tasks and determine if in fact there is a division of these tasks into occupational categories by the clustering of job titles.

Procedures

1. A search of the pertinent literature to determine in what activities physicians' employees are participating and to observe any significant trends.

2. A review of current programs designed to train allied health workers to assist physicians in providing medical care to patients outside the hospital setting.

3. Consultation with educators, physicians, and employees regarding tasks that should be included on a questionnaire sent to physicians' employees.

4. Development of a comprehensive inventory of tasks performed by physicians' employees in providing services to patients outside the hospital setting.

5. A local pre-survey of the questionnaire in order to validate the tasks for completeness, technical accuracy, and clarity of meaning.

6. A survey of national sample population of physicians' employees, using the task inventory questionnaire.

7. Publication of an occupational analysis report using the survey results as compiled by a computer program.

8. Development of new curricula or improvement of existing curricula, using the results of the survey.

I. INTRODUCTION

Early in 1968, the Division of Vocational Education of the University of California at Los Angeles was funded by the United States Office of Education for a research and demonstration project to develop curricula and instructional materials in the allied health occupations. These curricula and materials are designed for use in pre-service and in-service education through the associate degree level. The major objectives of the Allied Health Professions Project (AHPP) were: (a) to develop curricula and instructional materials for allied health occupations; (b) to develop innovative instructional programs for pre-service and in-service training appropriate to the occupations selected; (c) to establish a curriculum center for the allied health professions; and (d) to provide for continuing evaluation and upgrading of the programs to be developed.

The initial goal of the Project was to prepare instructional materials for approximately 18 selected occupations. However, since the Project was originally conceived, various technical experts and medical care authorities have suggested that the field of interest be enlarged. Appendix A contains a list of the allied health occupations currently being studied, as well as those being considered for study.

In February of 1970 it was decided to add to the existing list a study of the medical office assistant occupation. Concurrence was received from Ralph C. Kuhli, M.P.H., Director, Department of Allied Medical Professions and Services, Division of Medical Education of the American Medical Association.

Several investigations have shown that an increased number of assistants, and the maximum utilization of their skills and knowledge, can be instrumental in increasing the number of patients the physician can serve. A study (1969) in "Medical Economics" shows that solo practitioners without an assistant generally average 71 patient visits per week; by hiring one assistant the number could be increased to 113. Depending on the type of practice, physicians with two assistants could handle 43 percent more visits than the 113.

In a study, "An Exploratory Examination of the Duties of Allied Health Workers," conducted by the Health Manpower Council of California, it was observed that with one clinical assistant, a physician could gain approximately 35 hours per month for seeing patients. With an extra clerical assistant, nearly 33 more hours could be gained.

In view of these findings and the fact that health manpower shortages are expected to grow more acute, it is clear that the training and optimal utilization of physicians' employees

can be invaluable in alleviating critical health manpower conditions. Since 85 percent of health care activities take place outside the hospital (Martin Karp, 1970), an in-depth study of the various categories of physicians' employees and what they do (for the purpose of developing and improving instructional material) should not be delayed.

Limited surveys of physicians' employees have been made; these have usually been restricted to a specific geographical area. Most of the surveys studied recently (designed primarily as time and motion studies) related to broad functions such as "time spent with patient" or "time spent performing secretarial duties." Other recent studies were directed to a cost-and-income analysis concerning physicians' employees. None was found that had been directed toward a large-scale comprehensive survey of specific tasks delegated to those employees. Consequently, AHPP conducted its own study, and the findings are included in this report.

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II. PROCEDURES

Development of a Task Inventory

The first phase of the Medical Office Assistant study was preparation of a comprehensive task list of the activities that physicians' employees perform. The following sources were used: (1) Federal and State Civil Service job descriptions; (2) interviews with physicians, physicians' employees, and medical assistant instructors at community colleges and proprietary schools; and (3) questionnaires used in past surveys of specialty practices. The References (page 103) include other sources consulted in preparing the task inventory.

During development of the task inventory it became obvious (as expected) that physicians' employees are involved in two broad categories of responsibilities. The first category includes clerical, secretarial, office management, and business functions. The second category embraces clinical and technical activities. The results of the study indicated that practically all of the physicians' employees who responded performed tasks in each of the two categories, regardless of job title or classification. (Appendix B contains a list of the 45 different titles that were recorded by the 292 respondents.) The questionnaire was therefore designed to encompass both broad categories of responsibility. Parts I and II of the questionnaire included 122 tasks related to clerical, secretarial, office management, and business functions. Parts III and IV consisted of 108 tasks classified as clinical and technical tasks. The subclassifications under each major grouping are the following:

1. Clerical, Secretarial, and Management
   (a) Reception of Patients and Visitors
   (b) Public Relations
   (c) Secretarial
   (d) Scheduling Patients
   (e) Medical Records
   (f) Office Management and Housekeeping

2. Business Office
   (a) Billing and bookkeeping
   (b) Cashiering and Banking
   (c) Credits and Collection
   (d) Payment of Vendors' Bills
   (e) Payroll

3. Diagnostic Tests and Procedures

    (a) Specimens: Obtaining and Handling

    (b) Urinalysis

    (c) Hematology

    (d) Microbiology, Pathology, and Sterilization

    (e) Electrocardiograms

    (f) X-ray Procedures

4. Examination and Treatment Room Procedures

    (a) Preparation of Patient and Assistance to Doctor

    (b) Injections

    (c) Physical Therapy

    (d) First Aid and Emergency

    (e) Specialty Practice Procedures

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Pre-Survey Activity

A pre-survey of the task list was conducted to validate it and to make any necessary changes, additions, or deletions. The questionnaire was mailed to nine physicians' employees who were recommended by officers of the American Association of Medical Assistants (AAMA) and by instructors of medical assistant programs at junior colleges. Copies of the survey form were also sent to educators and to officials of the AAMA to obtain critiques. Participants who responded to the pre-survey of the questionnaire, as well as those who offered a critique, are listed in the Acknowledgements.

Feedback from the pre-survey respondents and from the two types of critiques was used to make the changes considered appropriate. The major change was a reduction in the size of the questionnaire. This decrease was made by eliminating reference to the rather complex laboratory and radiology procedures that are not commonly performed by physicians' employees.

Development of a Survey Population

To collect survey data on hospital-based allied health workers, the Project used 48 hospitals throughout the United States to represent the national survey population. For surveying those allied health workers not usually found in a hospital setting, such as physicians' employees, another approach was needed. After considering several methods, two were selected: (1) soliciting from practicing physicians the names of their medical assistants, and (2) supplementing this list with names from the American Association of Medical Assistants.

The names of the physicians who were asked to identify their medical office assistants were taken from the National Directory of the American Medical Association, which lists both members and non-members. The names of the AAMA members were supplied by the AAMA headquarters in Chicago. Following are the statistical details (by source) related to the development of the total survey population of 292 respondents:

AMA Directory

Total number of doctors contacted	649
Mail returned, marked "retired," "deceased," or "wrong address"	(62)
Questionnaire returned: "does not employ a medical assistant"	(8)
Net potential returns	579
Names received and questionnaires mailed	315
Questionnaires completed and returned	216
Questionnaires received too late for inclusion in computer processing	(6)
Net respondents used from AMA director	210

AAMA Directory

Names received from AAMA and questionnaires mailed	103
Questionnaires completed and returned	83
Questionnaires received too late for inclusion in computer processing	(1)
Net respondents used from AAMA	82
Total survey sample	292

Design of the Survey Instrument

The desired result of the AHPP survey of physicians' employees, conducted between March and June of 1971, was primarily the establishment of guidelines for developing instructional material based on tasks actually performed, as indicated by the survey. It was decided by the Project staff that designing a survey instrument using a behaviorally specified task inventory would be a valuable aid toward identifying the information that must be taught and the related skills to be developed by physicians' employees. The survey format therefore included the following questions:

Does the individual perform the task?

Does the individual supervise the performance of the task?

What is the frequency with which each task is performed?

What is the level of difficulty of the task?

It was assumed that physicians' employees themselves could most accurately describe task frequency. The assessment of difficulty by the respondents was considered valuable in that it reflected the employees' own perception of their work. For purposes of instruction this assessment might prove useful in establishing levels of proficiency. In terms of behavioral objectives, it directs attention to areas where special instructional emphasis should be considered. Informational material from the survey instrument appears in Appendix C; a sample page of the questionnaires appears in Appendix E.

Design and Purpose of the Survey Instrument

The most useful information for curriculum development provided by respondents in answering these questions is in regard to whether or not a task is performed. When a task is performed by a substantial proportion of respondents in a defined category of emplo ees it would seem sufficient justification for inclusion of the task in developing curriculum. Supervision of the task would also qualify it to be part of the instructional material on the gr unds that effective supervision usually requires the same knowledge and skills as performance.

The results of the task survey do not by themselves provide the full range of information required for developing instructional material for task performance. All the dimensions essential to task performance are not obtainable in the answers to questions that were directed

to the workers. For example, the dimension of "difficulty" has both a subjective and objective aspect. Subjective information may readily be obtained from the respondent, but measurement of the objective aspect requires expert analysis and evaluation of the skills and the related pertinent knowledge that a student or worker must gain.

Background Information

Each person to whom the questionnaire was mailed was requested to furnish background information covering his work situation and certain personal data. Questions were asked concerning education, certification, years in present position, number of doctors in the office, and type of medical specialty.

A sample of the Background Information Questionnaire appears in Appendix D.

III. DATA ANALYSIS

Analysis of Background Information from Respondents

Background information from respondents was analyzed according to five general categories of occupational titles which were consclidated from the 45 different titles (Appendix B) reported by the respondents. The five categories are listed below with a description of all the job titles that were merged into each category.

Registered Nurse: All respondents who indicated registered nurse, or registered nurse combined with another title (e.g., office manager, executive assistant, pediatric assistant, medical assistant, etc.).

Licensed Professional Nurse: All respondents who indicated licensed professional nurse, licensed vocational nurse, or nurse (without a specific designation). Examples are: nurse-receptionist, nurse-bookkeeper, nurse-office assistant, etc.

Medical Office Assistant (technical): A consolidation of respondents who indicated a title that denoted a clinical or technical skill; e.g., medical assistant-medical technician, radiology technician, laboratory technician, laboratory technologist, laboratory assistant, etc.

Medical Office Assistant (generalist): A consolidation of respondents who indicated medical office assistant or similar title, such as physician's assistant, doctor's assistant, medical assistant-office manager, etc.

Administrative and Clerical: A combination of respondents who indicated such titles as medical secretary, receptionist, bookkeeper, administrative assistant, office manager, etc.

All analyses in the report will be related to these five categories and will be abbreviated as follows:

Registered Nurse — RN

Licensed Professional or Vocational Nurse—LPN

Medical Office Assistant (technical)—MOA-T

Medical Office Assistant (generalist)—MOA-G

Administrative and Clerical—ADM-CL

Respondents by National Census Area

The number of inquiries sent to physicians requesting the names of th ir medical office assistants was based on the proportion of population by census area. For most areas the number of questionnaires returned by each area approximated this proportion. The rate of response from the New England, Middle Atlantic, and South Atlantic areas was higher; for the East North Central and West Central areas it was lower. (See Table 1.)

The highest percentage of registered nurses was in the Middle Atlantic States; the highest percentage of licensed nurses was in the East North Central area. The highest percentage of respondents with specialized technical training was in the West North Central States and West South Central area. The majority of respondents classified as medical office assistants (generalist) was in the East North Central States and the Pacific States.
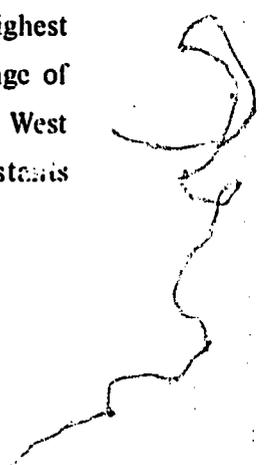
TABLE 1

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY NATIONAL CENSUS AREA

Occupational Category

Census Area	RN N = 57	LPN N = 26	MOA-T N = 15	MOA-G N = 74	ADM-CL N = 94	TOTAL N = 267
New England	5.2	0.0	0.0	4.1	3.2	3.4
Middle Atlantic	28.0	7.7	0.0	6.8	10.5	12.4
South Atlantic	10.5	15.4	6.7	6.8	13.6	10.9
East North Central	24.6	23.1	13.3	29.6	22.1	24.3
West North Central	12.3	15.4	33.3	6.8	15.8	13.5
East South Central	5.3	7.7	6.7	5.4	7.4	6.4
West South Central	3.5	19.2	26.7	9.5	11.6	10.9
Mountain	1.8	0.0	0.0	13.5	3.2	5.2
Pacific	8.8	11.5	13.3	17.5	12.6	13.0

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Sex

As expected, the majority of the 277 respondents who indicated their sex were female. The nine male respondents consisted of two RNs, three MOA-Ts, three MOA-Gs, and one LPN.

Age

The mean age of the 280 respondents who indicated their age was 40, and the mode was 44. Approximately 62 percent of the RNs and more than 50 percent of all the other categories (except the administrative-clerical group, who were approximately 49 percent) were in the 31-through-50 age group. (See Table 2-1 below.)

TABLE 2-1

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY AGE

Occupational Category

Years	RN N = 60	LPN N = 29	MOA-T N = 15	MOA-G N = 78	ADM-CL N = 98	TOTAL N = 280
61 and over	5.0	6.9	6.6	3.8	3.0	4.4
51—60	13.3	17.2	6.6	12.7	20.4	15.7
41—50	35.0	34.5	13.3	29.6	30.6	30.6
31—40	26.7	17.2	40.2	24.2	18.5	22.8
21—30	20.0	24.2	26.7	24.3	25.5	24.0
18—20	0	0	6.6	5.2	2.0	2.5

Academic Education

Approximately 97 percent of the total respondents had at least a high school (or equivalent) education, and approximately 60 percent indicated training beyond high school. Ten respondents had earned a bachelor's degree: four in Nursing, two in Foreign Languages, and one each in English, Social Science, Chemistry, and Far East Studies. (See Table 2-2 below.)

TABLE 2-2

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY LEVEL OF EDUCATION

Occupational Category

Level of Education	RN N = 59	LPN N = 28	MOA-T N = 15	MOA-G N = 77	ADM-CL N = 98	TOTAL N = 277
Less than High School	0	14.3	0	3.9	2.1	3.2
High School or Equivalent	16.9	50.0	46.6	39.0	41.8	36.9
Some College (no degree)	32.2	21.4	26.7	39.0	36.7	34.3
Associate Degree	8.5	3.6	13.3	9.0	8.2	8.3
Bachelor's Degree	5.1	0	6.7	1.3	5.1	3.6
*Other	37.3	10.7	6.7	7.8	6.1	13.7

*Includes RNs with diplomas from three-year nursing schools, LPNs who attended vocational schools, and respondents who attended either business schools or technical vocational schools.

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Technical or Other Training

Because the largest number of respondents indicated "other" for technical or other training, a detailed examination of each questionnaire was made. (See Table 2-3 below.) The findings disclosed a variety of courses and training programs, ranging from three weeks to three years. The short-term programs were related to such business courses as secretarial, bookkeeping, shorthand, typing, public relations, data processing, and medical insurance, and the medical or technical courses included anatomy, physiology, medical terminology, medical law, and first aid. The long-term courses and programs were related to two and three year diploma and certificate nursing schools for RNs and LPNs, laboratory and radiology technician courses, and medical assistant training programs.

Most of the short-term training or specific courses were taken in University Extension Continuing Education Programs, or at proprietary schools. The largest number who had attended vocational schools were the LPNs and the MOA-Gs. A large number of respondents indicated "none" or did not answer, and the small number who indicated they had some on-the job training may have misinterpreted the item that was worded "on-the-job apprenticeship."

TABLE 2-3

PERCENTAGE OF RESPONDENTS BY TECHNICAL OR OTHER TRAINING PROGRAMS

Occupational Category

Description of Program	RN N = 54	LPN N = 29	MOA-T N = 14	MOA-G N = 72	ADM-CL N = 91	TOTAL N = 260
On-the-Job	9.2	17.2	35.8	18.0	7.7	13.4
Military	0	3.4	21.4	2.8	1.0	2.7
Manufacturer's Courses	0	3.4	7.1	2.8	0	1.5
Vocational School	5.6	45.0	0	22.2	10.0	15.7
Other	24.1	24.2	28.6	30.4	22.0	25.5
None	61.1	6.8	7.1	23.8	59.3	41.2

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Certificates, Licenses, and Registrations

Of the 284 who responded to this question, 149 or approximately 53 percent were certified, licensed, or registered in the areas described in Table 2-4. Approximately 84 percent of the 149 (125) were either RNs, LPNs, or medical office assistants. Twelve respondents who indicated that they had earned certificates for completion of typing, medical terminology, bookkeeping, medical insurance, etc. were not included in Table 2-4.

TABLE 2-4

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY CERTIFICATE, LICENSE, OR REGISTRATION HELD

Description	Number	Percent
Registered Nurse	56	37.5
Certified Medical Assistant	41	27.5
Licensed Nurse	28	18.8
Laboratory Technician	11	7.5
Radiology Technician	5	3.3
Surgical Technician	4	2.7
Dental Technician	2	1.3
Medical Technologist	1	0.7
Ophthalmic Technician	1	0.7

Years of Experience

Of the 277 respondents who replied with respect to "years of experience," 78.4 percent indicated five years or longer. By occupational group, the LPNs had the highest percentage (93.2%) of respondents with five or more years of experience followed by the RNs with 86.2 percent. The MOA-T category was the lowest with 66.7 percent (See table 2-5 below.)

TABLE 2-5

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY YEARS OF EXPERIENCE

Occupational Category

Years of Experience	RN N = 58	LPN N = 29	MOA-T N = 15	MOA-G N = 77	ADM-CL N = 98	TOTAL N = 277
31 or more	14.5	6.9	6.7	3.9	5.1	7.2
21—30	29.0	24.2	6.7	16.9	12.2	18.0
16—20	18.9	3.4	6.7	16.9	12.2	13.7
11—15	10.2	20.7	26.6	10.4	16.3	14.4
5-10	13.6	38.0	20.0	23.4	30.6	25.1
3-4	8.6	3.4	6.7	9.0	8.3	7.9
2 or less	5.2	3.4	26.6	19.5	15.3	13.7

Years in Present Position

Of the 283 respondents who indicated "Years in Present Position," 56.5 percent had been in the same position five years or more. The highest percentage (62.3%) by occupational category were the RNs followed by the MOA-Gs with 57.7 percent. The percentages for the other categories were: MOA-Ts (53.4%), ADM-CLs (54.0%) and LPNs (51.8%) (See Table 2-6 below.)

TABLE 2-6

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY YEARS IN PRESENT POSITION

Occupational Category

Years in Present Position	RN N = 61	LPN N = 29	MOA-T N = 15	MOA-G N = 78	ADM-CL N = 100	TOTAL N = 283
21 or more	4.9	3.8	6.7	11.4	7.0	7.4
16–20	14.7	3.4	6.7	9.1	7.0	8.9
11–15	19.7	13.7	6.7	12.8	11.0	13.4
5–10	23.0	30.9	33.3	24.4	29.0	26.8
3–4	14.7	17.2	13.3	12.8	11.0	13.2
2 or less	23.0	31.0	33.3	29.5	35.0	30.3

Type of Practice, Number of Physicians, and Medical Speciality

Type of Practice

More than two-thirds of the total respondents were employed in a private office practice as compared to a group or clinic practice. This ratio was consistent for each occupational category except the MOA-T, where approximately 50 percent indicated association with a group or clinic practice. The heavier concentration of the MOA-Ts in these practices may be an indication of the need for and better utilization of more highly specialized technicians. The relatively equal distribution of the occupational categories in the private office practice reaffirms the generally accepted notion that physicians' employees have a wide range of job titles that may relate to levels of education, training, or the nature of a specialized job function. (See Table 3-1 below.)

TABLE 3-1

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY TYPE OF PRACTICE

Occupational Category

Type of Practice	RN N = 59	LPN N = 28	MOA-T N = 15	MOA-G N = 75	ADM-CL N = 95	TOTAL N = 272
Private Office	66.1	67.9	53.3	70.6	67.3	67.3
Group	25.4	7.1	26.7	14.7	21.0	19.1
Clinic	5.1	25.0	20.0	14.7	9.5	12.1
Group and Clinic	3.4	0	0	0	1.1	1.1
Medical School	0	0	0	0	1.1	0.4

Number of Physicians

As shown in Table 3-2 below, the majority of participants in the survey were employed by an independent practitioner, and as might have been expected, they were in the MOA-G and ADM-CL category. The needs and the economics of an independent practitioner could conceivably be best served by the generalist and administrative-clerical category of physician's employee, even when there is more than one employee in the office. The RN and the MOA-T were most frequently employed in offices that had more than one practicing physician. This may be an indication that in a multiple-physician office, highly trained employees or specialized technicians are utilized. This could be related to the needs and economics of the practice where sophisticated diagnostic and therapy equipment and facilities are available.

TABLE 3-2

NUMBER OF PHYSICIANS

Occupational Category

Number of Physicians	RN N = 61	LPN N = 28	MOA-T N = 15	MOA-G N = 77	ADM-CL N = 100	TOTAL N = 281
1	39.3	50.0	33.3	57.1	48.0	48.0
2	24.6	32.1	33.3	22.1	23.0	24.6
3	16.4	10.7	0	10.4	14.0	12.5
4 or more	19.7	7.2	33.3	10.4	15.0	14.9

Medical Speciality

Over half of the respondents were employed in speciality practices (either single or multiple). In terms of percentages, the highest occupational categories were the RN and ADM-CL. The LPN and both categories of MOA were predominantly employees in a primary-care type of practice. These findings suggest that the occupational category that has usually attained a high educational or training level is more apt to be employed in a speciality practice. (See Table 3-3 below.)

TABLE 3-3

MEDICAL SPECIALTY

Occupational Category

Medical Specialty	RN N = 53	LPN N = 24	MOA-T N = 14	MOA-G N = 71	ADM-CL N = 93	TOTAL N = 255
*Primary Care	43.4	62.5	57.1	53.5	40.8	47.9
Specialty (Single)	18.9	20.8	14.2	28.1	26.0	23.9
Multiple Specialties	37.7	16.7	28.7	18.4	33.2	28.2

*Includes general practitioners, family practitioners, internists, and pediatricians.

Radiology and Laboratory Services

The Background Information part of the questionnaire included a request that the respondent indicate whether radiology and laboratory procedures were available within the office, ordered from outside, or whether both sources were utilized. Of the 250 respondents who answered for radiology, 78 (31.2%) stated that the procedures were available within the office; 140 (56%) stated that only external services were used; and 32 (12.8%) stated that both internal and external sources were used. (See Table 4-1 below.)

For laboratory tests and procedures, 111 (43.2%) of the 257 respondents who answered indicated that they were performed within the office; 74 (28.8%) designated external sources only; and 72 (28.0%) stated that both internal and external sources were used. (See Table 4-2 below.)

SOURCE OF PROVIDING RADIOLOGY AND LABORATORY SERVICES INDICATED BY PERCENTAGE OF RESPONDENTS

TABLE 4-1 RADIOLOGY

Occupational Category

Source	RN N = 53	LPN N = 26	MOA-T N = 14	MOA-G N = 72	ADM-CL N = 85	TOTAL N = 250
Internal	22.6	27.0	64.4	29.1	34.0	31.2
External	68.0	53.9	14.2	58.3	54.2	56.0
Internal and External	9.4	19.1	21.4	12.6	11.8	12.8

TABLE 4-2 LABORATORY

Occupational Category

Source	RN N = 56	LPN N = 28	MOA-T N = 14	MOA-G N - 72	ADM-CL N = 87	TOTAL N = 257
Internal	34.2	53.6	64.5	44.5	41.4	43.2
External	28.4	21.4	14.2	30.5	32.2	28.8
Internal and External	37.4	25.0	21.3	25.0	26.4	28.0

Salary Range

The RNs, as expected, were in the higher salary range, as shown in Table 5. Of the 59 RNs who responded, 72.9 percent were receiving $6,000 or more. The over-$6,000 category included 29.6 percent of the 27 LPNs, 60 percent of the 15 MOA-Ts, 40.6 percent of the 74 MOA-Gs, and 51.5 percent of the 97 in the administrative-clerical category. Of the 272 respondents who stated their salary range, 51.5 percent were receiving more than $6,000 annually. A bi-modal distribution of the salary range was evident for the total number of respondents: approximately 38 percent were in the $4,000 to $5,000 annual salary range, and 36.4 percent were in the $6,000 to $7,999 range.

TABLE 5

PERCENTAGE DISTRIBUTION OF RESPONDENTS BY ANNUAL SALARY RANGES

Occupational Category

Salary Range	RN N = 59	LPN N = 27	MOA-T N = 15	MOA-G N = 74	ADM-CL N = 97	TOTAL N = 272
Less than $2,000	0	3.7	0	0	0	0.4
$2,000–$3,999	5.1	18.5	13.3	12.2	9.3	10.3
$4,000–$5,999	22.0	48.2	26.7	47.2	39.2	37.8
$6,000–$7,999	52.6	22.2	26.7	28.4	38.1	36.4
$8,000–$9,999	16.9	7.4	13.3	9.5	8.2	10.7
$10,000–$11,999	1.7	0	13.3	2.7	2.1	2.6
$12,000–$15,000	1.7	0	6.7	0	3.1	1.8

Number of Non-Doctor Employees

The request that the total number of non-doctor employees (including the respondent) be indicated appeared on only 103 of the questionnaire forms mailed, and 99 respondents answered this question. As indicated in Table 6, approximately 80 percent of the 99 respondents are employed in offices with more than one employee, and approximately 60 percent are in offices with more than two employees. These findings support the generally accepted concept that an efficiently conducted physician's practice cannot operate without trained clerical and/or clinical assistance, whether this be in the form of a single employee with a combination of skills or a number of specialized employees.

Because of the rapidly rising demand for physicians' services, the increasing accounting workload, and the expansion of clinical services, the need for qualified physicians' helpers will undoubtedly continue to grow.

TABLE 6

PERCENTAGE DISTRIBUTION OF NUMBER OF NON-DOCTOR EMPLOYEES IN OFFICE (INCLUDING RESPONDENT)

Occupational Category

Number of employees	RN N = 16	LPN N = 10	MOA-T N = 3	MOA-G N = 33	ADM-CL N = 37	TOTAL N = 99
One	25.0	40.0	33.3	30.3	8.3	22.2
Two	18.7	20.0	0	21.3	21.6	20.2
Three	12.5	0	33.3	15.1	10.8	12.1
Four	6.3	10.0	0	9.1	16.1	11.1
Five	0	10.0	0	0	10.8	5.1
Six	0	0	0	6.1	10.8	6.1
Seven or More	37.5	20.0	33.3	18.1	21.6	23.2

Table 7 shows that more than 65 percent of the respondents used a manual (including Peg Board) billing and bookkeeping system. Approximately 11 percent were using bookkeeping machines, and more than 13 percent were served by outside agencies. The 11 percent that indicated "other" did not specify the method.

TABLE 7

DISTRIBUTION OF TYPE OF BILLING AND BOOKKEEPING SYSTEM

Type	Number	Percent
Manual	96	42.6
Peg Board or "Write-it-Once"	51	22.7
Bookkeeping Machine	24	10.7
Data sent to an outside service	21	9.3
Data transmitted by EDP equipment to an outside service	8	3.6
Other (not specified)	25	11.1
TOTAL	225	100.0

IV. RESULTS OF SURVEY

The analysis of respondents' replies in regard to performance of tasks was developed by the same five occupational categories previously established and used in analyzing the respondents' background characteristics in Part III. The abbreviations and their meanings are listed below; for specific job titles included in each of these categories please refer to page 9.

RN   Registered Nurse

LPN   Licensed Professional or Vocational Nurse

MOA-T   Medical Office Assistant (technical)

MOA-G   Medical Office Assistant (generalist)

ADM-CL   Administrative and Clerical

The 230 tasks on the questionnaire are categorized into 22 functional areas. For each of these areas a brief description is given of the function, followed by a discussion of the findings for each occupational category. In some cases, a functional area may have clusters of tasks with a commonality; each cluster is therefore discussed separately.

25

Reception of Patient and Visitors (10 tasks)

Description

Building goodwill between the doctor and his patients starts with the first appearance of the patient in the reception area. This initial contact is nearly always made with a physician's employee. The image she presents to patients and non-patient callers by her mannerisms, behavior, and appearance can make the difference between success and failure in a physician's practice. Some of these characteristics are intangible and cannot be measured by mail surveys designed to appraise tasks of action. The importance and criticality of these factors partly determine how the ten tasks in the area are performed and what should be emphasized in training physicians' employees to accomplish them.

The general functions in this area relate to greeting and accommodating the patient as soon as possible after arrival, maintaining or overseeing the housekeeping of the reception area, obtaining necessary information from the patient, and keeping the patient informed when appointments are not going according to schedule.

Findings

An average of approximately 75 percent of respondents were involved in all of the ten tasks. The frequency was several times a day except for tasks 7, 9, and 10, related to explaining delays to waiting patients, interrupting appointments for an emergency, and screening non-patient callers.

By occupational category, the MOA-Gs and the ADM-CLs reported the highest percentages, 77 percent and 76 percent, respectively. The RNs and LPNs were second highest with 67 percent each, and the MOA-Ts were the lowest with 56 percent.

I. CLERICAL, SECRETARIAL AND MANAGERIAL

A. Reception of Patients and Visitors

Task	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Greet patient and confirm appointment date and time.	●	1	●	1	◕	1	●	1	●	1	●	1
2. Interview new patient to complete a registration form.	◕	1	◕	1	◕	1	●	1	●	1	●	1
3. Interview patient for insurance or other third party sponsorship information.	●	1	●	1	●	1	◑	1	●	1	◑	1
4. Instruct new patient to complete registration form.	●	1	●	1	●	1	◑	1	◑	1	◑	1
5. Obtain signature for assignment of insurance payment to doctor and signature authorization for release of information.	◐	2	◕	1	●	2	◕	2	●	1	◕	1
6. Complete a "multi-purpose" patient visit form.	◐	1	◐	1	◐	1	◐	2	◐	1	◐	1
7. Explain to waiting patients what delay to expect when running behind schedule.	●	3	●	1	●	2	●	2	●	3	●	2
8. Escort patient to examination or treatment room.	●	1	●	1	◕	1	◐	1	◑	1	●	1
9. Interrupt scheduled appointments for an emergency and explain circumstances to waiting patients.	●	3	●	2	◑	2	●	3	●	3	●	3
10. Screen visitors and salesmen requesting to see doctor.	●	1	◕	2	◕	2	●	2	●	1	●	2

Public Relations (8 Tasks)

Description

The first personal contact that a patient makes when he arrives at a physician's office will nearly always be with the physician's employee. At this point, whether he is a new patient or not, the public relations image begins to form. The image, favorable or unfavorable, will depend on the relationship established and observations made during the reception and waiting period.

As the image develops, it may change, but if the initial impression is poor, it is difficult for subsequent favorable influences to alter an unpleasant reaction. The first impression also influences the patient's attitude toward the physician and may result in a pre-conceived, distorted impression of the doctor. The eight tasks listed under Public Relations represent an extension of the public relations image that began to form during the reception and waiting period.

Findings

Approximately two-thirds of all respondents were performing these tasks at a consistent frequency for all occupational categories except the MOA-T. The MOA-Ts reflected the smallest percentage performing the tasks and also performed them less frequently than did the other occupational categories. However, these findings do not indicate less emphasis on the importance and need for good public relations practices for this category of worker. The figures are probably related to the fact that tasks performed by an MOA-T are usually technically oriented, whereas the eight tasks under Public Relations deal with administrative functions.

I. CLERICAL, SECRETARIAL AND MANAGERIAL (Continued)

B. Public Relations

Task	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Receive calls and answer questions from patients or potential patients.	●	1	●	1	●	1	●	1	●	1	●	1
2. Explain doctor's fees to patients.	◗	1	◗	1	◗	2	●	1	●	1	●	1
3. Observe employees for appropriate dress, grooming, and behavior.	◔	2	◔	1	◔	2	◑	1	◑	2	◑	2
4. Answer letters from patients.	◑	3	◑	2	◑	4	●	3	●	2	◗	3
5. Attend meetings and participate in community activities related to doctor's practice.	◑	4	◑	4	◑	4	◗	4	◑	4	◑	4
practice.												
6. Maintain personal information card index on each patient.	◗	1	◗	1	◑	1	●	1	◗	1	◗	1
7. Make arrangements for patient admission to hospital.	◗	2	◗	1	◗	3	●	2	●	2	●	2
8. Assist patient in planning for admission to hospital.	●	2	●	1	●	2	●	2	●	2	●	2

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED :

1 · SEVERAL TIMES DAILY ; 3 · DAILY OR SEVERAL TIMES A WEEK;
2 · ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 · ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM; ◔ · 1 TO 25 %; ◑ · 26 TO 50 %; ◗ · 51 TO 75 %; ● · 76 TO 100%

JKH

Secretarial (14 Tasks)

Description

The secretarial duties required by a physician to operate his practice with efficiency are similar to the tasks performed by the secretaries of administrators in other enterprises. The one difference is the need for the physician's employee to be familiar with medical terms. The fourteen tasks under this function include activities related to taking and transcribing dictation, handling mail and telephone, and the miscellaneous tasks generally performed by a secretary.

Findings

An average of 53 percent of respondents performed secretarial duties. The task performed several times daily by the largest number of respondents (90%) was "place and answer telephone calls." The second highest, "pull or file patient's medical record" (task number 7), was also performed several times daily by 83 percent of respondents.

As might be expected, the highest percentage of workers performing secretarial duties were the ADM-CL and MOA-G, of whom 61 percent and 58 percent, respectively, indicated performance of these tasks several times daily. The lowest percentage was the MOA-T category with 35 percent, and the RN and LPN group each reporting 48 percent.

I. CLERICAL, SECRETARIAL AND MANAGERIAL (Continued)

C. Secretarial

Task	RN N=61 %	F	LPN N=29 %	F	MOA-T N=15 %	F	MOA-G N=79 %	F	ADM-CL N=100 %	F	TOTAL N=284 %	F
1. Transcribe medical information.	◑	1	●	1	◑	2	◑	2	◕	1	◑	1
2. Take dictation in shorthand and transcribe.	◑	4	◑	1	◑	2	◕	3	◑	1	◑	1
3. Arrange meetings, conferences and/or travel accommodations.	◑	3	◔	4	◔	4	◔	4	◕	4	◑	4
4. Open and sort mail.	◕	2	◕	2	◕	4	●	2	◕	2	◕	2
5. Answer doctor's routine mail.	●	2	●	3	●	2	◕	2	◕	2	●	2
6. Place and answer telephone calls.	●	1	●	1	●	1	●	1	●	1	●	1
7. Pull or file patient's medical record.	◑	1	●	1	◕	1	●	1	●	1	◑	1
8. Maintain a record of doctor's absence and how to reach him.	◑	1	◕	1	◑	1	●	1	◕	2	◑	1
9. Gather data to complete statutory reports for government agencies.	◔	3	◔	4	◔	2	●	4	◕	4	◑	4
10. Receive and organize handling of medication samples.	◑	2	●	2	◑	2	◕	2	◑	2	◑	2
11. Prepare and replenish supplies in physician's bag.	◑	4	◕	4	◑	3	◑	4	◑	4	◑	4
12. Act as liaison between doctor and other professional associates.	◑	1	◑	1	◑	1	◑	2	●	3	◕	2
13. Operate office business machines.	◑	1	◑	2	◑	1	◔	1	◔	1	◔	1
14. Operate telephone switchboard.	◔	1	○	1	○	1	○	1	◑	1	◔	1
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○				○		○		○		○	

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED:

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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK:

○ = DO NOT PERFORM; ◔ = 1 TO 25 %; ◑ = 26 TO 50 %; ◕ = 51 TO 75 %; ● = 76 TO 100%

31

46

Scheduling Patients (8 Tasks)

Description

The scheduling of patients' appointments with the physician is a help in the orderly conduct of a medical practice. An exception (besides an emergency) might be where circumstances do not demand an appointment system for the practice to function efficiently.

The success or failure of a physician's practice could hinge on the judicious scheduling of patients. The objective of good scheduling is to assist the physician in attending with minimal pressure to the greatest number of patients he can conscientiously serve. Consequently, one would expect that most of the physician's employees participate, either directly or indirectly, in come aspects of scheduling. The important considerations that a physician's employee must use in efficient scheduling are: (1) the nature of a patient's visit, (2) the type of practice, and (3) the physician's preference and specific instructions. Another consideration is the convenience and reasonableness of the appointment time for the patient.

Findings

The eight tasks related to scheduling patients represent the mechanics of the scheduling process and in no way measure its efficiency.

Three of the tasks (numbers 1, 2, and 3) are directly related to making initial appointments or arranging for subsequent appointments. Approximately 80 percent of all respondents performed these three tasks several times daily. The ADM-CL was the highest occupational group (88%), second highest was the MOA-G (84%), the MOA-T category was the lowest (68%), and the RN and LPN categories were 71 percent and 74 percent respectively.

The other five tasks (numbers 4 through 8) relate to activities after the appointment has been made, i.e., cancellations, changes, and reminding patients of future appointments. Approximately 55 percent of respondents were performing such scheduling tasks once a week or several times a month except for task number 7, which was performed daily. The highest percentage (62%) by occupational category was the ADM-CL, followed by the MOA-G group where 58 percent indicated that they were performing these tasks. The lowest percentage (43%) was reported by the RN category; the LPNs and MOA-Ts reported 52 percent and 45 percent respectively. The frequency of performance by occupational group was consistent throughout.

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Make appointments for new patients.	●	1	●	1	●	1	●	1	●	1	●	1
2. Arrange for next appointment before patient leaves the office.	●	1	●	1	●	2	●	1	●	1	●	1
3. Arrange another appointment for patient who cancels one.	●	1	●	2	●	2	●	1	●	1	●	1
4. Remind patient of his appointment prior to date scheduled.	●	4	●	2	●	3	●	3	●	3	●	3
5. Contact patients with later appointments to fill in for cancellations.	●	1	●	3	●	3	●	3	●	3	●	3
6. Cancel appointments for the doctor when necessary and reschedule patient.	●	4	●	3	●	4	●	4	●	3	●	3
7. Review scheduled appointments with doctor.	●	1	●	2	●	1	●	2	●	2	●	2
8. Note in an appointment book scheduled times that doctor will be away from office.	●	4	●	4	●	3	●	4	●	4	●	4

33

Medical Records (11 Tasks)

Description

For proper medical care as well as for legal purposes, a chronological record (both medical and personal) is a requirement for each patient under a physician's care. The medical information record includes all pertinent details related to examinations, diagnosis, and treatment. The personal information record includes family and personal medical history and personal data. The maintenance and control of these records are nearly always the responsibility of the physician's employee(s).

The degree of employee involvement in maintenance and control of records, i.e., actually making entries in a record, is a matter of the physician's preference and the qualifications of the employee. Reports or files will vary in number and kind according to the size and type of practice and the physician.

Findings

The fourteen tasks under this function fall into three general categories: (1) Completion, maintenance, and control of records (tasks 1, 2, 5, 6, 7, 8, 9, and 10); (2) Making entries to records (tasks 3 and 4); and (3) Review of records (task number 14).

The first category of tasks was performed by 44 percent of respondents daily or several times daily except for task number 9, "search for a missing or misfiled record," and task number 10, "purge historical files." The ranking of occupational categories in descending order by average percent of respondents performing medical record tasks is: 71 percent each of ADM-CL and MOA-G; 62 percent of LPNs; 52 percent of RNs and 45 percent of MOA-Ts.

"Completing medical history portion of patient's records" (task number 3), was being done by 40 percent of respondents. The LPN category reported the highest percent (54%) performing this task, followed by the RNs with 46 percent. The MOA-Gs and the ADM-CLs each reported 38 percent. The MOA-T group was the lowest with 33 percent. The frequency of performance for all occupational categories was several times daily.

"Entering notes to patient's records" (task number 4) was being performed by 68 percent of total respondents, with the RN category reporting the highest percent (79%), followed by the LPN group with 75 percent. Following in order of descending percentage were the ADM-CLs with 59 percent and the MOA-Ts with 46 percent.

"The review of medical records for completeness and accuracy" (task number 14) was performed several times daily by 50 percent of respondents. The MOA-G group had the highest percentage (56%) performing this task, followed by the RNs with 53 percent and the LPNs with 51 percent. The MOA-Ts and ADM-CLs had 46 percent and 43 percent making this kind of a review. The frequency of performance was several times daily for all categories of workers except the MOA-Ts who indicated that they performed this task once a month or less.

I. CLERICAL, SECRETARIAL AND MANAGERIAL (Continued)

E. Medical Records

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Initiate a medical record file for a new patient.	◕	1	◕	1	◑	1	●	1	●	1	●	1
2. Arrange for special filing of medical records, EKG tracings and X-ray reports.	◕	2	◕	1	◕	1	●	1	◕	1	◕	1
3. Complete medical history portion of medical record.	●	1	◑	1	◑	1	◑	1	◑	1	◑	1
4. Enter notes in medical record.	●	1	◑	1	◑	1	◑	1	◑	1	◕	1
5. File reports and correspondence in patient's medical chart.	◕	1	●	1	◑	2	●	1	●	1	●	1
6. Follow up on house calls and hospital visits for information needed for office medical record.	◑	2	◕	1	◑	4	◕	2	◕	2	◕	2
7. Establish control system for location of medical record folders.	◔	2	◑	1	◑	2	◑	1	◑	1	◑	1
8. Pull medical record files for scheduled appointments.	◕	1	●	1	●	3	●	1	●	1	●	2
9. Search for a missing or misfiled medical record.	◕	4	●	4	◑	4	●	4	◕	4	●	4
10. Review, separate, and purge medical record files.	◔	4	◑	4	◑	4	◑	4	◑	4	◑	4
11. Review medical records for completeness and accuracy.	◕	1	◕	1	◑	4	◑	1	◑	1	◑	1
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	
	○		○		○		○		○		○	

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED :
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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK:
○ = DO NOT PERFORM ;   ◔ = 1 TO 25 % ;   ◑ = 26 TO 50 % ;   ◕ = 51 TO 75 % ;   ● = 76 TO 100 %

Office Management and Housekeeping (18 Tasks)

Description

The usual management functions, i.e., planning, organizing, staffing, directing, and controlling, are applicable to a physician's practice as to any other enterprise. Depending on the type and size of practice, the differences might be in the extent of the activity and the factor of who and how many participate in these functions. The range can be wide in scope and numbers of people.

A solo practice represents one extreme where the physician himself assumes all management functions, delegating only routine or clerical duties to his employee(s). In addition, the solo practitioner may purchase professional management aid, such as accounting, auditing, and tax services, from an outside source. At the other extreme, a multiple partnership or group practice might warrant a full-time professional employee to assume management responsibilities, with the physician(s) providing only general guidelines.

Between these two examples, management functions may be delegated to the physician's employee(s) with various degrees of participation by the physician(s).

The results of this study do not reflect the high-level management functions assumed by physicians or outside agencies because the survey instrument was designed to cover only those tasks performed by physicians' employees.

Three tasks (2, 5, and 9) are related to housekeeping responsibilities usually delegated to the physician's employees, such as "arranging for custodial care of the building," "inspection of waiting rooms, treatment rooms, etc.," and "maintenance of equipment,"

Findings

Four specific areas of management functions are reflected by 15 of the 18 tasks. Personnel matters are covered by tasks 1, 6, 13, 14, and 15. Purchasing and inventory responsibilities are represented by tasks 3, 4, 7, and 10. Statistical reports and general accounting functions are reflected by tasks 8, 11, and 16, and budgets are covered by task number 12.

Tasks related to personnel matters were being performed once a month or less often by approximately 31 percent of respondents by occupational category, the highest percentage (approximately 40%) being the MOA-Gs and the lowest percentage the RNs (approximately 17%).

Tasks related to purchasing and inventory responsibilities were being performed at varying intervals from several times a week to once a month or less, by approximately 52 percent of respondents. By occupational category, the highest percentages were the LPNs and MOA-Gs, 55 percent and 58 percent, respectively; the lowest percentages were the RNs and MOA-Ts, 47 percent and 48 percent respectively.

Statistical reporting and general accounting functions were performed once a month or less by approximately 30 percent of respondents. By occupational category the highest percentages (35% each) were shared by the MOA-Gs and the ADM-CLs. The RNs were the lowest at 14 percent.

Housekkeeping tasks (numbers 2, 5, and 9) were performed by approximately two-thirds of respondents except for task number 2, "arrange for custodial care" which was performed by only 29 percent of the respondents. "Inspection of rooms for proper housekkeeping, temperature, and supplies" was performed daily (task number 5) and "arranging for custodial services" and "maintenance of equipment" were performed once a month or less (tasks 2 and 9).

I. CLERICAL, SECRETARIAL AND MANAGERIAL (Continued)

F. Office Management and Housekeeping

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Maintain an office procedure manual.		4		3		3		4		4		4
2. Arrange for external and internal custodial care of building.		4		4		4		4		4		4
3. Establish inventory control and reorder levels for medical supplies.		3		3		2		3		3		3
4. Order medical supplies, medications, and office supplies.		3		3		3		3		3		3
5. Inspect all areas and rooms for proper housekeeping, temperature, and adequate supplies.		1		1		1		1		2		2
6. Perform personnel duties: evaluations, hiring, termination, and training.												
7. Maintain catalogs of supplies and equipment pertinent to doctor's practice.		4		4		4		4		4		4
8. Prepare statistical reports in regard to patient visits and procedures.		4		4		4		4		4		4
9. Arrange for maintenance and repair of equipment.		1		2		2		4		4		4
10. Approve request for purchases.		4		4		4		4		4		4
11. Prepare a financial report of income and expenses.		3		4		3		4		4		4
12. Prepare a budget for income and expenses.		4		4		2		4		4		4
13. Arrange meetings with doctor to resolve problems.		4		0		2		4		4		4
14. Schedule vacations and arrange for coverage.		4		4		3		4		4		4
15. Participate in externship programs for Medical Office Assistant training programs.		4		4		4		4		4		4
16. Maintain a fee schedule for services.		4		4		4		4		4		4
17. Develop accounting and statistical reports related to a partnership practice.		4		4		4		4		4		4
18. Develop accounting and statistical reports related to a group practice.		0		0		4		4		4		4

KEY TO ABBREVIATIONS FOR FREQUENCY (F)   1 = SEVERAL TIMES DAILY; 3 = DAILY OR SEVERAL TIMES A WEEK;
TASK IS PERFORMED OR SUPERVISED: 2 = ONCE A WEEK OR SEVERAL TIMES A MONTH; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK: ○ = DO NOT PERFORM;   = 1 TO 25%;   = 26 TO 50%;   = 51 TO 75%;   ● = 76 TO 100%

Billing and Bookkeeping (19 Tasks)

Description

As soon as possible and practicable after a billing or bookkeeping transaction takes place, whether associated with the physician's practice or a personal item, an original document must be executed as a record for tax and accounting purposes. The complete and accurate documentation of financial information is as important and critical as a patient's medical record. Regardless of what system of billing and bookkeeping is used, the initial source document for input to the system is practically always the responsibility of the physician's employee.

More than 65 percent of the 225 respondents who indicated the type of billing and bookkeeping system they used stated that it was completely manual and more than 10 percent indicated part manual and part machine. The remainder of the respondents indicated either "outside service," "electronic data processing," or "other." Regardless of the method used to process the bookkeeping and billing input, all physicians' employees are involved in creating the input either directly by generating charges for services, or indirectly by recording and processing the input and thereafter participating in the patient billing and collection activities, or the disbursements for services and materials.

Most practicing physicians employ outside professional accountants to perform the accounting and auditing functions beyond the scope usually accomplished by their immediate employees. The 19 tasks surveyed for this function are therefore restricted to those tasks usually performed by physicians' employees. These 19 tasks are divided into three groups for analysis of the survey findings.

The first group includes ten tasks (1, 2, 3, 4, 5, 8, 11, 17, 18, and 19) and represents the tasks involved in creating source or original documents related to patient charges for services rendered. The second group (numbers 12, 13, 14, 15, and 16) represents tasks performed in processing insurance claims and other third-party claims. The third group (numbers 6, 7, 9, and 10) covers general bookkeeping tasks and the recording of non-practice financial information.

Findings

Patient billing tasks, group one, were performed daily or several times daily, except for task number 11, by more than 45 percent of respondents. Task number 11, "type itemized bill," was performed monthly. Within the occupational categories, the highest percentage

(60%) performing these tasks was the ADM-CL group and the second highest (53%) was the MOA-G. The MOA-T category was the lowest, approximately 25 percent, and the RNs and LPNs approximately 28 percent and 31 percent respectively. The frequency of performance by occupational group was consistent with that indicated for all respondents.

Insurance billing tasks, group one, were performed by approximately 48 percent of respondents with the frequency varying from several times a day to several times a week. By occupational category, the highest percentage (70%) performing these tasks was the ADM-CL and the second highest (53%) was the MOA-G category. The lowest percentages (17%) were the MOA-T category and the RN and LPN categories (24% each). For all occupational categories, except the MOA-T, the frequency of performance varied from several times a day to several times a week, the same as for the total group. The MOA-Ts performed these tasks less frequently and varied from several times a week to once a month or less.

General bookkeeping tasks, group three, were performed daily or several times a week by approximately 23 percent of respondents. The highest percentage (38%) by occupational category was the ADM-CL, followed by the MOA-G, with 32 percent; the RN and MOA-T categories each had 11 percent, and the LPN category was 12 percent. The frequency of performance by occupational categories remained the same as for the total number of respondents.

II. BUSINESS OFFICE
A. Billing and Bookkeeping

Task	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Complete a patient ledger card for new patients.	◕	1	●	2	●	2	●	1	●	1	●	1
2. Receive and review copy of a multiple-purpose patient visit slip after doctor sees patient.	◕	1	◕	1	◑	1	●	1	●	1	●	1
3. Prepare charge slips for services to patient.	●	1	●	1	●	1	●		●	1	●	1
4. Record patient charges to an original entry book.	●	1	●	1	●	2	●		●		◕	1
5. Extract billing information from doctor's notes.	◑	1	●	1	●	2	●	1	●	1	●	1
6. Prepare and send information to an outside billing agency.	◔	4	◑	4	◑	4	◑	1	◑	3	◑	4
7. Total and reconcile entries made in a record of original entries.	◑	2	●	2	●	3	●	2	◕	2	●	2
8. Post entries from original entry record to patient's ledger card.	●	1	●	2	●	3	●	1	●	2	●	1
9. Post totals from original entry record to combined or special journals.	◑	1	◑	4	◑	4	●	2	●	2	◑	2
10. Record entries for non-practice income and expense in a record of original entries.	◑	1	◑	4	◑	1	◑	3	◑	2	◑	2
11. Type an itemized or coded bill and mail to patient.	◑	4	●	4	●	4	●	4	●	4	●	4
12. Complete indemnity insurance forms for patient to submit his claim.	◑	1	●	3	●	2	●	2	●	1	●	1
13. Complete insurance forms for filing assigned insurance claims.	◑	2	●	3	●	2	●	2	●	1	●	2
14. Complete Medicare payment request Form SSA-1490.	◑	1	●	1	◑	3	●	2	●	1	●	1
15. Complete Workmens Compensation Forms.	◑	2	◑	3	◑	4	●	3	●	4	●	3
16. Complete MediCal claims form (Medi-Cal in California).	◑	2	◑	1	◑	4	◑	2	●	4	●	3
17. Obtain and record patient billing information for hospital visits by physician.	◕	2	◕	2	●	1	●	2	●	2	●	2
18. Obtain and record billing information for house calls made by physician.	◔	4	◑	3	◑	4	●	2	●	2	◕	2
19. Post an adjusting entry for difference between payment accepted and the physician's usual fee.	◔	2	◑	4	◑	2	●	4	●	2	◕	2

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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
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Cashiering and Banking (9 Tasks)

Description

Payments for the physician's services are nearly always made directly to his office. They may be collected when the patient makes a visit or may be mailed in by the patient, the insurance company, or other third-party payers. The receipt of payments, and the safeguarding and banking activities related to payments received are tasks usually delegated to the physician's employees. These responsibilities may be shared among a number of employees or they may be assigned to one person if the volume of activity merits a full-time employee.

The nine tasks under this function include four (numbers 1, 2, 7, and 8) for cashiering duties and five (numbers 3, 4, 5, 6, and 9) for banking activities.

Findings

Approximately 60 percent of respondents indicated that they were performing cashiering duties daily except for task number 7, "establish and control petty cash fund," which was performed once a month or less by 46 percent of the total number of respondents. The ranking of occupational categories by percentage of respondents daily performing the cashiering tasks was: 76 percent for ADM-CL, 69 percent for MOA-G, 42 percent for RN, 37 percent for LPN, and 29 percent for MOA-T.

Banking chores were performed daily or monthly by approximately 47 percent of respondents. Tasks 3, 4, and 5 were performed daily and tasks 6 and 9 were performed monthly. The highest percentage (60%) by occupational group was the ADM-CL, followed by the MOA-G where 55 percent reported performing banking duties. For the RN group, 32 percent indicated that their work included banking tasks and the LPN and MOA-T groups each indicated 18 percent. The frequency of performance by occupational category was consistent with the total respondents, except for task number 6 which was not performed by the LPN group.

II. BUSINESS OFFICE (Continued)

B. Cashiering and Banking

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Collect payments at time of visit and make entry to an original record.	●	1	●	1	◕	2	●	1	●	1	◕	1
2. Accept, endorse, and record checks received for payment on account.	◕	2	◕	1	◕	2	◕	1	●	1	◕	1
3. Reconcile cash count and receipts.	◕	2	◕	2	◕	2	◕	2	◕	2	◕	2
4. Prepare a bank deposit ticket.	◕	2	◕	2	◔	2	◕	2	◕	2	◕	2
5. Make bank deposits.	◑	4	○	4	◑	4	◑	2	◑	2	◑	2
6. Reconcile bank accounts.	◔	4	◕	0	◑	2	◕	4	●	4	◕	4
7. Establish and control petty cash fund.	◕	2	◕	4	◕	2	◕	4	◔	4	◕	4
8. Post payments received to patient ledger card.	◕	1	◕	1	◕	2	◕	1	◕	1	◔	1
9. Process unredeemed checks returned by bank.	◕	4	◕	4	◑	3	◕	4	◕	4	◕	4

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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

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45

58

Credits and Collections (13 Tasks)

Description

The findings of the survey disclosed that approximately 69 percent of the respondents, representing all occupational categories of physicians' employees, were collecting payments from patients several times daily at time of visit (task number 1 under II-B). Nevertheless, the largest proportion of a physician's income is probably received some time after his services are rendered. Payments may be received from patients, insurance companies, or other third-party payers. Third-party benefits do not usually pay 100 percent of the bill because of partial coverage, deductible features or exclusions. In any event, whether the patient himself or his guarantor is liable (in part or in full), it has not been a rigid practice historically for physicians to demand payment at the time patients are seen. Consequently, the responsibility of collecting patients' bills is usually delegated to the physicians' employees.

Very little credit information is available for a physician's employees to review when accounts become delinquent. Commonly used registration forms for new patients include provision for only minimal credit information, i.e., employer, occupation, and guarantor of bill if other than patient. With so little credit information in an economy that considers credit and budget payments a way of life, the collection of the physician's past-due accounts is probably the most challenging and difficult responsibility that a physician's employee has. Complicating the problem of collecting past-due medical bills is the fact that a debtor tends to place a low priority on paying for medical care. The reason may be related to the fact that credit is automatically available to him and that he had not planned or expected to incur the liability, particularly a major expense.

The 13 credit and collection tasks are divided into three groups for purposes of discussing the findings of the survey by occupational category. These groups are: (1) tasks that require direct communication with patient (tasks 2, 3, 4, 5, 7, and 13); (2) tasks involving communications with insurance companies and/or attorney (tasks 6 and 8); (3) miscellaneous tasks that cover activities with collection agencies, procedure matters, and reports (tasks 1, 8, 9, 10, 11, and 12).

Findings

Group one tasks, communication with patient on credit and collection, occurred once a month or less with approximately 35 percent of respondents except for task number 2, "make financial arrangements with patient," which was performed several times a week by 48 percent of respondents and task number 3, "execute a promissory note for payment," which was

performed several times a week by approximately !0 percent of respondents. By occupational category, the highest percentage performing these tasks was the ADM-CL group (46%), followed in order by MOA-Gs (41%), RNs and LPNs (19% each), and 15 percent of the MOA-Ts. The exception, task number 2, "make financial arrangements with patient," was performed by more than 60 percent of the ADM-CL and MOA-G categories, 34 percent of the LPNs, 25 percent of the RNs, and 19 percent of the MOA-Ts.

Group two tasks, contacts with insurance companies and attorneys, were performed once a month or less by approximately 37 percent of all respondents. By occupational categories, the highest percentages were ADM-CL (53%) and MOA-G (43%); the lowest percentage was reported by MOA-T (10%); the RN category was 20 percent and the LPN 19 percent.

Group three tasks, collection agency activity, reports and procedural matters, were performed once a month or less by 37 percent of all respondents. As expected, the occupational group that reported the highest percent was the ADM-CL, of which 51 percent performed these tasks once a month or less. The MOA-G category reported the second highest or 43 percent, and lowest was the MOA-T with 11 percent. The RN and LPN groups reported 20 and 14 percent, respectively. In all categories the frequency of performance was once a month or less.

II. BUSINESS OFFICE (Continued)

C. Credits and Collections

Task	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Assist in formulation of collection policy and selection of a collection agency.	◕	4	◕	4	◔	4	●	4	●	4	●	4
2. Make financial arrangements with patient.	●	1	●	1	◕	2	●	3	●	3	●	3
3. Execute a promissory note for payment.	●	1	◕	4	◔	4	◕	3	◕	4	●	3
4. Mail statements with collection notices or standard form collection letters.	◕	4	●	4	◔	4	●	4	●	4	●	4
5. Call patient or guarantor in regard to payment of bills.	◕	4	●	4	◔	4	●	4	●	4	●	4
6. Communicate with insurance companies on unpaid claims.	◕	4	●	4	◔	4	●	4	●	4	●	4
7. Complete a creditors' claim form for deceased patients.	◕	4	◕	4	◔	4	●	4	●	4	◕	4
8. Communicate with attorneys on unpaid accounts in litigation.	◕	4	◕	4	◔	4	●	4	●	4	◕	4
9. Investigate mail returned because of bad addresses.	◕	4	◕	4	◔	2	●	4	●	4	●	4
10. Age and analyze accounts for unusual problems and abnormal trends.	◕	4	◕	4	◔	3	●	4	◕	4	◕	4
11. Complete forms to assign accounts to an outside collection agency.	◕	4	◕	4	◔	4	●	4	◕	4	◕	4
12. Review and evaluate status reports of accounts with a collection agency.	◕	4	◕	4	◔	4	●	4	◕	4	◕	4
13. Refer to doctor, with recommendations, offers to compromise settlement of account.	◕	4	◕	4	◔	4	◕	4	●	4	◕	4

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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
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○ = DO NOT PERFORM ; ◔ = 1 TO 25 % ; ◑ = 26 TO 50 % ; ◕ = 51 TO 75 % ; ● = 76 TO 100 %

Payment of Vendors' Bills (6 Tasks)

Description

These six tasks cover the business aspects of a physician's practice related to purchasing of supplies and services, maintaining necessary files, and payment of invoices.

Findings

The survey findings indicate that 68 percent of the respondents were involved in ordering medical and office supplies (see task I-F-4). The six tasks listed under Payment of Bills are related to the activities following the purchase of supplies, i.e., processing invoices, preparing checks for payment, and the necessary bookkeeping.

Approximately 37 percent of the respondents were performing these tasks once a week or several times a month, except for task number 1, which is performed once a month or less than once a month. Within occupational categories, 52 percent of the ADM-CLs performed these tasks, 44 percent of the MOA-Gs, 20 percent of the RNs, 17 percent of LPNs, and 13 percent of MOA-Ts. Frequency of performance followed a pattern similar to that of the total number of respondents.

II. BUSINESS OFFICE (Continued)

D. Payment of Vendor's Bills

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Maintain a disbursement record to fit doctor's practice.		4		4		4		4		3		4
2. Review invoices for validity and accuracy.		2		3		3		4		3		3
3. Prepare checks for doctor's signature.		3		4		1		3		3		3
4. Maintain a file of paid and unpaid invoices.		2		4		2		3		3		3
5. Approve invoices for payment.		3		4		2		3		3		3
6. Enter in a check register payments made to vendors		2		4		2		3		3		3

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Payroll (6 Tasks)

Description

A practicing physician's expenses consist in great part of salaries, whether he is a solo practitioner with one or two employees, or is in a partnership or group with a number of assistants. These costs will probably increase in the future because the number of employees a physician needs to conduct his practice effectively continues to grow. In addition to an increase in payroll workload related to additional employees, federal and state laws require maintaining complete and accurate payroll records.

For these reasons, the survey questionnaire included six tasks for processing and keeping payroll records that a physician's employee may be responsible for in various degrees, depending on the size and type of practice. The initial payroll system may have been designed by a professional accountant or management consultant, and thereafter it may be a physician's employee who assumes part or all of the payroll bookkeeping tasks.

Findings

Excluding task number 3, 27 percent of the respondents were performing payroll bookkeeping tasks. The largest percentage, by occupational group, was the ADM-CL (43%) followed by the MOA-G (31%), the RN (13%), the MOA-T (10%), and the LPN (9%). These tasks were performed once a month or less, except for numbers 1 and 2, which were performed weekly or several times a month. Frequency of performance by occupational categories was similar to that for the total number of respondents.

Task number 3, "submit payroll information to an outside service," was performed monthly by 5 percent of respondents. By occupational category, the pattern was similar to that for the total number of respondents except in the LPN category which indicated that this task was not being performed at all.

II. BUSINESS OFFICE (Continued)
E. Payroll

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Prepare and maintain employees' payroll records.	●	3	◕	4	◔	2	●	3	●	3	◕	3
2. Review and approve employees' payroll time and salary.	●	4	◕	4	◕	2	◕	3	◕	3	◕	3
3. Submit payroll information to an outside payroll service.	◕	4	○	0	◔	2	◔	4	◔	4	◔	4
4. Prepare forms to pay employees' and employers' taxes (income and FICA).	●	4	◕	4	●	4	●	4	●	4	●	4
5. Record employees' and employers' taxes to a record of original entry.	◕	4	◕	4	◕	4	●	4	●	4	◔	4
6. Prepare employees' wage and witholding tax statement (Form W-2).	◕	4	◕	4	◔	4	●	4	◕	4	◔	4

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KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
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53

Specimens: Obtaining and Handling (9 Tasks)

Description

The results of tests made on various laboratory specimens obtained from patients probably provide the most valuable aid that a physician has for the diagnosis and treatment of illness. Obtaining these specimens is an important responsibility usually delegated to the physician's employees. In practically all cases the patient must be instructed in the procedure to be followed, and in some cases he must be provided assistance. In collecting and handling specimens, the physician's employee must see that a sufficient quantity is obtained in a proper and non-contaminated container that is clearly and accurately identified. After the specimen is obtained it must be stored under proper conditions, including correct temperature if there is a delay before the tests are performed. Caution must be exercised so that the specimen does not become contaminated and cause the results to be in error. When necessary, preservatives are added to specimens.

Findings

In connection with the survey findings for this function it is significant to note from the Background Data that 72 percent of the respondents reported some facilities for performing laboratory tests in the office.

The task performed by the largest number of respondents under this function was "instruct patient with regard to collection of specimen" (task number 1). This task was performed by 70 percent of all respondents, excluding the ADM-CL category where 47 percent performed the task; 80 percent of the other occupational categories performed this task several times a day.

Five of the nine tasks (numbers 1, 2, 3, 4, and 9) are related to instructing patients, selecting proper container, labeling container, and sending specimens to the laboratory. By percentage of respondents, the LPN category ranked the highest with 83 percent, followed by the RNs with 77 percent, the MOA-Ts with 68 percent, the MOA-Gs with 54 percent, and the ADM-CLs with 34 percent. All categories performed these tasks several times a day except for the ADM-CL, where the frequency varied from several times daily for collecting specimens and sending them to the laboratory (tasks 4 and 9), to weekly or several times a month for tasks 1, 2, and 3.

The task of collecting eye, nose, and throat specimens from patients (task number 5) was being performed either once a day or several times a day by the lowest number of respondents (20%). The MOA-T category was the highest with 40 percent performing the task, followed by

the RNs and LPNs each with 27 percent and the ADM-CL category with 9 percent.

Collecting urethral or vaginal specimens (task number 6) was performed by 22 percent of all respondents and included all occupational categories. The occupational categories ranked by percentage of respondents who performed this task are: 44 percent of the LPNs, 35 percent of the RNs, 26 percent of the MOA-Ts, 23 percent of the MOA-Gs, and 10 percent of the ADM-CLs. This task was performed once a day or several times a day by all categories except the ADM-CLs who indicated performing the task once a month or less.

All occupational categories participated several times daily in assisting with collection of specimens from patients (task number 8). The highest percentage of respondents by occupational category was the MOA-G group with 63 percent and the lowest percentage (18%) by the ADM-CL.

The preparation of specimens for shipment (task number 7) was performed several times daily by 43 percent of all respondents. The highest (62%) was reported by the LPN category and the lowest was the ADM-CL (20%). Between these extremes were the MOA-Gs with 57 percent and the MOA-Ts with 46 percent.

III. DIAGNOSTIC TESTS AND PROCEDURES

A. Specimens: Obtaining and Handling

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Instruct patient with regard to collection of specimen.	●	1	●	1	◕	1	●		●	3	◕	1
2. Select proper container to hold specimen and give to patient.	●	1	●	1	●	1	◕	1	●	3	◕	1
3. Receive specimen from patient, record pertinent data on container, and place in proper storage.	◕	1	●	1	◕	1	◕	1	◕	2	●	1
4. Collect fecal or urine specimens from patient.	●	1	●	1	●	1	◕	1	◕	1	◕	1
5. Collect eye, nose, and throat specimens from patient.	◕	1	◕	1	●	1	◑	1	◑	2	◔	1
6. Collect urethral or vaginal specimens from patient.	◑	1	◑	1	●	2	◑	1	◔	4	◔	1
7. Prepare specimens for shipment.	◑	1	◕		◕	1	◕	1	◑	1	◔	1
8. Assist with collection of specimens from patient.	◑	1	◕		◕	1	◕	1	◑	1	◔	1
9. Send specimen (s) to laboratory.	◕	1	◕		◕	1	◕	1	◕	1	◕	1

KEY TO ABBREVIATIONS FOR FREQUENCY (H)
TASK IS PERFORMED OR SUPERVISED :

1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK ;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM; ◔ = 1 TO 25 %; ◑ = 26 TO 50 %; ◕ = 51 TO 75 %; ● = 76 TO 100 %

Urinalysis (6 Tasks)

Description

One of the laboratory specimens usually obtained from patients is urine. The physical and chemical properties of normal urine are so constant that any abnormality caused by illness is easily detected by examination and testing. Part of a routine physical examination includes urinalysis. The results of these tests are of great value to the physician in the diagnosis and treatment of various physical disorders. Because the results of examining and testing urine are so valuable to the physician in his clinical diagnosis, the accuracy and validity of the reading and recording of results by the physician's employees is self-evident.

The urinalysis procedure (tasks 1 - 6), like other routine tests, can be carried out in the physician's office without an elaborate laboratory or sophisticated equipment. Diagnostic tests can be performed with speed and convenience by the use of special Labstixs (chemically treated paper or plastic strips) that give the results for a single test; multiple purpose Labstixs give results for several tests. The six tasks related to urinalysis are limited to those that can be performed conveniently in a physician's office without a full-scale laboratory designed for more complex procedures.

Findings

Except for the ADM-CL category, all occupational groups performed all these tasks several times a day. As might be expected, the highest average percentage (67%) by occupational category was the MOA-T group, followed by the RN and MOA-G groups with 44 percent each and 43 percent for the LPNs.

In the ADM-CL category, the tasks of "recording physical appearance," "performing bio-chemical tests," and "examining specimens microscopically" (tasks 1, 3, and 6) were performed several times daily. "Centrifuging specimens," "performing bile tests," and "performing specific gravity tests" (tasks 2, 4, and 5) were performed once a month or less. The average percentage of performance was 32 percent.

III. DIAGNOSTIC TESTS AND PROCEDURES (Continued)

B. Urinalysis

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Record color, gross appearance, and odor of urine specimen.		1		1		1		1		1		1
2. Centrifuge sample of the urine specimen.		1		1		1		1		4		1
3. Perform bio-chemical tests (e.g., glucose, potein, etc.) using paper strips or tablet.		1		1		1		1		1		1
4. Perform bile tests (simple tablet method).		1		1		1		1		4		1
5. Perform urine specific gravity tests.		1		1		1		1		4		1
6. Examine urine specimens microscopically.		1		1		1		1		1		1

KEY TO ABBREVIATIONS FOR FREQUENCY (F)

1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

TASK IS PERFORMED OR SUPERVISED :

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM; = 1 TO 25 %; = 26 TO 50 %; = 51 TO 75 %; = 76 TO 100%

Hematology (14 Tasks)

Description

Hematology is the science dealing with the study of the blood, its functions, and its abnormalities. The analyses performed on the blood are important aids for diagnosing diseases of the body. Because the appearance and composition of blood may change when certain diseases are present, numerous laboratory tests have been developed. The results of these tests provide valuable information about a patient's state of health or a particular disease. When a physician orders blood tests on a patient, the blood may be drawn and the tests performed within the office, the blood may be drawn in the office and sent to an outside laboratory, or the patient may be sent directly to a laboratory. When blood is drawn in the physician's office it is often the employee who performs the task, and, if trained to do so, he may even perform the requested test. The complete blood count, a common routine blood test which may include the hematocrit, red blood cell count, hemoglobin estimation, white blood cell count, and differential count can be carried out on a few drops of blood usually obtained from the capillaries by pricking the finger. Blood for tests where larger quantities are required is drawn from a vein and can also serve for the complete blood count. The 14 tasks under hematology include two for drawing blood (tasks 1 and 2) and 12 tasks (numbers 3 through 14) for performing various tests and operating test equipment.

Findings

The task performed by the largest number of total respondents was "obtain blood specimen from capillary (finger, etc.)" (task 1). Thirty-two percent of the total respondents indicated that they performed this task several times a day except for ADM-CL category where 11 percent indicated this task was performed once a month or less. The highest percentage (60%) by occupational category was the MOA-T group, followed by 48 percent of the RNs, 47 percent and 35 percent for the LPNs and MOA-Gs. "Obtaining blood specimen from vein" (task 2) was performed by the third highest percentage (24%) of respondents.

In descending order of percentage performing the task by occupational category, the sequence is practically the same as for obtaining blood from a capillary vessel. The MOA-Ts were first with 53 percent, followed by the LPNs (44%), RNs (38%), MOA-Gs (23%), and ADM-CLs (7%). The task was performed several times daily by all occupational categories except for the ADM-CLs who carried out this procedure once a month or less.

The task performed by the second largest number of respondents (30%), was "perform hemoglobin tests and/or hematocrit reading" (task 6). This task was performed several times daily by all occupational categories except for the ADM-CL group who performed the task once a month or less. In descending rank order by percentage of the occupational group: 73 percent of MOA-Ts, 51 percent of the RNs, 40 percent of the LPNs, 30 percent of the MOA-Gs, and 10 percent of the ADM-CLs.

Five of the 14 tasks are related to performing blood cell counts (tasks 4, 5, 7, 9, and 14). In ranking the occupational groups in descending order of average percentage, the MOA-T category was significantly higher, with 50 percent reporting that they performed the tasks several times daily. The MOA-G and LPN groups were second highest with 12 percent each. The RN and ADM-CL groups reported 9 percent and 4 percent respectively. All occupational categories reported that they performed these tasks several times daily except the ADM-CL group where the frequency was significantly less, that is, once a month or less.

"Operating miscellaneous laboratory equipment associated with blood tests" (tasks 10, 11, 12, and 13) was performed by an average of 8 percent of the respondents, ranging from a high of 16 percent, who operated a hemoglobinometer, to a low of 1 percent, who operated an automatic cell counter. The highest percentage of respondents by occupational group was the MOA-T; an average of 31 percent performed these duties ranging from a high of 40 percent who operated a colorimeter to a low of 20 percent who operated a hemoglobinometer. For the other occupational categories the average percentage operating these items of equipment were: LPNs (15%), MOA-Gs (11%), RNs (7%), and ADM-CLs (3%). Except for the ADM-CL groups, who indicated they performed these tasks once a month or less, all other categories operated the machines several times daily.

"Prepare and stain blood smears," task 3, was being performed by 46 percent of the MOA-Ts. The other occupational groups were significantly less, that is. LPNs (23%), MOA-Gs (15%), RNs (12%), and ADM-CLs (4%).

"Perform erthrocyte sedimentation rates" (task 8) was also performed several times daily by 46 percent of the MOA-T category. The other occupational groups were significantly less, that is, MOA-Gs (15%), LPNs (13%), RNs (10%), and ADM-CLs (4%).

III. DIAGNOSTIC TESTS AND PROCEDURES (Continued)
C. Hematology

Diagnostic Tests and Procedures	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Obtain blood specimen from capillary (finger, etc.).		1		1		1		1		4		1
2. Obtain blood specimen from vein.		1		1		1		1		4		1
3. Prepare and stain blood smears.		1		1		1		3		4		1
4. Perform differential cell count (Diff).		1		2		1		1		4		1
5. Calculate erythrocyte indices.		1		1		1		2		1		1
6. Perform hemoglobin test and/or hematocrit reading.		1		1		1		1		4		1
7. Perform red blood cell count (RBC).		1		1		1		2		4		1
8. Perform erythrocyte sedimentation rate (SED RATE).		4		1		1		2		4		1
9. Perform white blood cell count (WBC).		1		1		1		1		4		1
10. Operate automatic cell counter (Coulter counter)		0		1		0		1		1		1
11. Operate colorimeter.		1		1		1		1		4		1
12. Operate hemoglobinometer.		1		1		1		1		4		1
13. Operate microhematocrit reader.		1		1		1		1		4		1
14. Operate manual cell counting equipment.		1		1		1		1		1		1

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED :

1. SEVERAL TIMES DAILY ; 3. DAILY OR SEVERAL TIMES A WEEK ;
2. ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4. ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM; = 1 TO 25 %; = 26 TO 50 %; = 51 TO 75 %; ● = 76 TO 100%.

63

Microbiology, Pathology, and Sterilization (18 Tasks)

Description

A great deal of time and energy is devoted by the physician and his employees to identifying pathogenic microorganisms (bacteria that carry disease) from clinical specimens so that infections are not transmitted from one patient to others. Since these microorganisms are difficult to control, constant attention is required for their complete destruction. This attention involves the study of the nature, life, and actions of microorganisms (microbiology), the nature of disease through the study of their causes (pathology), and the eradication of harmful microorganisms (sterilization).

The 18 tasks in this area are concerned with three main functions: (1) assistance in obtaining smears and tissue specimens, (2) microscopic examination and processing of specimens to detect the presence of pathogenic organisms (microbiological examinations), and (3) the sterilization of instruments, material, and equipment in the medical office.

Sterilization duties are usually delegated to physicians' employees and are among their greatest responsibilities because of the serious consequences of improper performance. The tragic results that may occur when infectious bacteria are transmitted because an item was not sterilized properly can bring death to the victim or costly malpractice suits to the physican.

Findings

"Bacteriological examination and processing of specimens and tissues" (tasks 1 through 5) were performed by an average of 5 percent of the respondents. The MOA-T occupational category reported the highest percentage (30%) who performed these tasks. The majority of the tasks were performed daily or several times daily except for "stain microbial specimens" (task number 4) which was performed once a week or several times a month. All other categories of respondents reported less than 10 percent, MOA-Gs 7 percent, LPNs 6 percent, RNs 4 percent, and the ADM-CLs 2 percent.

"Assisting in obtaining smears" (task number 6) was performed by 45 percent of total respondents. The occupational categories ranked in descending order by percent were: LPNs 71 percent, MOA-Gs 60 percent, RNs 60 percent, MOA-Ts 26 percent, and ADM-CLs 20 percent. Frequency of performance was several times daily except for the ADM-CLs and MOA-Ts who indicated once daily or several times a week.

A smaller percentage (30%) of all respondents were "assisting in obtaining tissue specimen" (task number 7), compared to "obtaining smears" (task number 6). By occupational category, however, the respondents who performed this task reflected a heavy concentration in the same occupational groups, LPNs 47 percent, MOA-Gs 45 percent, RNs 38 percent, MOA-Ts 13 percent and ADM-CLs 12 percent. The frequency ranged from several times daily for the MOA-Ts, daily or several times a week for RNs, weekly or several times a month for the MOA-Gs and ADM-CLs, and once a month or less for the LPNs.

Sterilization procedures usually performed by physicians' employees are covered by 11 tasks, numbered eight through eighteen. An average of 49 percent of total respondents performed these tasks either several times daily or several times a week. A majority of the LPNs (75%), RNs (69%), and MOA-Gs (63%) performed these tasks at least several times a week and more frequently except for "clean sterilizing equipment" (task number 14) which was performed weekly or several times a month. The MOA-Ts and ADM-CLs reported that 37 percent and 24 percent, respectively, performed these tasks with frequency similar to the other occupational categories.

III. DIAGNOSTIC TESTS AND PROCEDURES (Continued)

D. Microbiology, Pathology, and Sterilization

	RN N=61 %	F	LPN N=29 %	F	MOA-T N=15 %	F	MOA-G N=79 %	F	ADM-CL N=100 %	F	TOTAL N=284 %	F
1. Prepare culture media.	◔	2	◔	2	◑	3	◔	2	◔	2	◔	2
2. Inoculate specimen on simple tube media.	◑	2	◑	1	●	1	◔	1	◔	1	◔	1
3. Prepare wet mounts.	◑	1	◔	1	●	4	◑	3	◑	2	◔	1
4. Stain microbial specimens.	◑	3	◑	4	●	3	◑	3	◑	1	◑	3
5. Examine stained specimens microscopically.	◑	2	◑	4	●	1	◑	3	◑	2	◑	1
6. Assist in obtaining smears.	●	1	●	1	◕	2	●	1	◑	2	●	1
7. Assist in obtaining tissue specimens.	●	2	◑	4	●	1	●	3	◑	3	●	2
8. Remove contaminated material and instruments from treatment room to work areas.	●	1	●	1	●	2	◑	1	●	1	●	1
9. Prepare equipment, instruments, and material for sterilization.	●	1	●	1	●	1	●	1	●	1	●	1
10. Check instruments or equipment for working condition prior to sterilization.	●	2	◕	1	●	2	●	1	●	1	●	1
11. Determine and separate by method of sterilization items to be sterilized.	●	1	●	1	●	3	●	1	●	1	●	1
12. Wrap instruments for sterilization.	●	1	●	2	●	1	●	1	◕	7	●	1
13. Wrap towels and dressings for sterilization.	●	3	●	2	●	3	◑	2	◔	2	◑	2
14. Clean sterilizing equipment.	●	3	●	1	◕	2	◕	4	●	2	◕	3
15. Sterilize equipment, instruments, and material.	●	1	●	1	●	1	●	2	●	1	●	1
16. Use sterilization color indicators to test sterilizer.	◕	1	●	1	●	2	◑	2	◑	2	◑	2
17. Store sterilized material.	◕	1	●	1	●	2	◕	2	◑	2	◑	2
18. Handle and store sterilized material to prevent contamination.	◕	2	●	1	●	2	◕	2	◕	1	◑	2
	○		○		○		○		○		○	

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED:

1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :
○ = DO NOT PERFORM; ◔ = 1 TO 25 %; ◑ = 26 TO 50 %; ◕ = 51 TO 75 %; ● = 76 TO 100%

Electrocardiograms (7 Tasks)

Description

The electrocardiogram (abbreviated ECG or EKG) is a piece of electronic equipment used in diagnosing abnormalities of heart action by graphically measuring and recording changes in electrical current generated when the heart beats. The electrocardiogram may, therefore, be made part of a patient's routine physical examination. It is not unusual for a physician's office to be equipped with an ECG machine. Certain tasks related to operating the machine and assisting the physician are usually performed by the physician's employees.

The medical interpretation of the electrocardiogram, a skill that requires many years of specialized study, is always made by the physician. Physicians' employees, however, are involved in practically all other aspects of the ECG machine and its procedures, such as maintenance and operation, preparation of the patient, and monitoring the machine during the procedure. The tasks included in the survey instrument are, therefore, restricted to those tasks usually performed by physicians' employees.

Findings

An average of 23 percent of respondents indicated that they performed the seven tasks related to electrocardiograms. The highest percentages by occupational category were reported by the MOA-Ts (50%), and the LPNs (42%); the MOA-G groups reported 28 percent, the RNs reported 25 percent, and ADM-CLs the lowest (10%).

III. DIAGNOSTIC TESTS AND PROCEDURES (Continued)

E. Electrocardiograms

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Prepare and test EKG (electrocardiograph) machine for proper and safe working condition.	◔	2	●	2	◕	1	◑	1	◔	1	◔	1
2. Prepare, instruct and assist patient for EKG test.	●	1	●	1	●	1	●	1	◑	3	◑	1
3. Assist physician during EKG test.	◑	2	●	1	●	1	◑	1	◑	4	◑	1
4. Monitor EKG graph for abnormal or erratic tracings.	◑	1	●	1	●	1	◕	1	◑	3	◕	1
5. Mount EKG graph on card.	●	1	●	1	●	1	●	1	◕	4	◕	1
6. Clean and maintain EKG equipment after test.	◑	1	●	1	●	1	◕	1	●	3	●	1
7. Operate EKG machine.	◑	1	●	1	●	1	◕	1	●	3	●	1

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED:
1 = SEVERAL TIMES DAILY; 3 = DAILY OR SEVERAL TIMES A WEEK;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK:
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X-Ray Procedures (4 Tasks)

Description

Because of the ability of X-rays to take pictures of bones and organs of the human body not otherwise visible, X-rays are invaluable for the examination and treatment of patients. X-ray equipment may be installed in the physician's office, enabling him to take many routine and uncomplicated X-ray photographs. When complex procedures are desired, which require more sophisticated equipment, the patient is referred to a radiologist (X-ray specialist). A physician's employee may not need intensive and highly specialized training to operate X-ray equipment for the routine procedures. She should, however, be informed about basic fundamentals of the nature and principles of X-ray equipment. She must also know the technique of preparing and positioning patients for specific views, and safeguarding patients from the hazards of X-ray exposure. In addition, she should be familiar with handling and processing X-ray films.

The X-ray films become part of a patient's medical record and are treated the same as any other part of the confidential record even though they may be in a separate file because of their size and bulk.

Findings

The survey results show that an average of 17 percent of respondents performed the four tasks included under X-ray procedures. In connection with this finding it should be noted that in the Background Data, 31.2 percent of respondents stated that radiology facilities of some type were available in the office. As might be expected, a significantly larger proportion (74%) of the MOA-T category, compared to the other categories, performed these duties several times daily. The second highest percentage (22%) was reported by the MOA-Gs, followed closely by the LPNs (21%); the RNs reported 17 percent doing these tasks and the ADM-CLs were the lowest with 7 percent. All occupational categories reported that they performed these duties several times daily except the RNs, who indicated once a day or several times a week, and the ADM-CLs, who performed the tasks once a month or less.

III. DIAGNOSTIC TESTS AND PROCEDURES (Continued)

F. X-Ray Procedures

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Prepare patient for radiographic position.	◔	2	◔	1	◑	1	◔	1	◔	4	◔	1
2. Take X-ray pictures.	◔	2	◔	1	◑	1	◔	1	◔	4	◔	1
3. Develop X-ray pictures.	◔	2	◔	1	●	1	◔	1	◔	4	◔	1
4. File and index X-ray films of patients.	◔	2	◔	1	●	1	◔	1	◔	4	◔	1

KEY TO ABBREVIATIONS FOR FREQUENCY (F)

1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

TASK IS PERFORMED OR SUPERVISED :

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS

○ = DO NOT PERFORM; ◔ = 1 TO 25 %; ◑ = 26 TO 50 %; ◕ = 51 TO 75 %; ● = 76 TO 100%

THAT PERFORM OR SUPERVISE THE TASK :

Examination and Treatment Room

Preparation of Patient and Assistance to Doctor (19 Tasks)

Description

When the patient proceeds from the waiting area to an examination or treatment room, the situation is nearly always under the control of a physician's employee. While the patient is waiting for the doctor, the physician's employee can perform a number of routine tasks that will help the physician to examine or treat the patient more rapidly. These duties may cover a wide range, i.e., preparing the room with supplies, allaying the fears and anxieties of the apprehensive patient, taking and recording the vital signs, assisting patient in undressing, preparing and positioning patient for examination, making patient comfortable, and, with children, giving them special attention while they are waiting.

When the doctor arrives, the physician's employee may leave the room or remain and provide assistance to the doctor. This assistance might involve handing the doctor supplies and instruments, taking part in minor surgical procedures, observing the patient, and recording notes.

The 19 tasks on the survey instrument for this function deal with the more common duties that a physician's employee might be expected to perform in the treatment and examination room.

Findings

The 19 tasks are divided into four groups for discussion purposes. Group One consists of the first four tasks related to preparation of patient; Group Two (tasks 5 through 10) deals with the taking and recording of patient's vital signs; Group Three (tasks 11 through 15) covers preparation of trays; Group Four (tasks 16 through 19) covers miscellaneous duties, i.e., assisting in minor surgery, maintaining supplies, dispensing medication, and giving instructions to patients.

Group One tasks, "preparation of patient," were performed several times daily by 70 percent of respondents. The LPN category reported the highest percentage (95%) followed by the RNs (90%), MOA-Gs (85%), and MOA-Ts (63%). The ADM-CLs had the lowest percentage (42%).

"Taking and recording vital signs," Group Two tasks, were performed by 46 percent of respondents, ranging from a high of 74 percent of the RNs to a low of 21 percent of the ADM-CLs. Between these extremes were the LPNs (70%), MOA-Gs (48%), and the MOA-Ts (32%).

Group Three tasks, "preparing trays," were reported as performed by 43 percent of the respondents. The highest percentage by occupational category who reported performing these duties was among the LPNs (66%) followed closely by the RNs (62%). The percentages for the remaining occupational categories were: MOA-G (56%), MOA-T (29%), and ADM-CL (18%).

The miscellaneous tasks under Group Four were performed by over half (57%) of the respondents. The highest percentage of respondents was in the LPN category where 82 percent indicated they performed these duties. The RNs followed closely (80%). The percentages for the other occupational groups were: MOA-G (71%), ADM-CL (40%), and MOA-T (38%).

IV. EXAMINATION AND TREATMENT ROOM PROCEDURES

A. Preparation of Patient and Assistance to Doctor

EXAMINATION AND TREATMENT ROOM PROCEDURES	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Prepare necessary equipment and supplies for doctor and patient.	●	1	●	1	●	1	●		●		●	1
2. Receive patient and explain nature of examination and what may be expected.	●	1	●	1	●	1	●	1	●	1	●	1
3. Instruct and assist patient in regard to disrobing and examining positions.	◕	1	●	1	●	1	●	1	●	4	●	1
4. Drape patient.	●	1	●	1	●	1	●	1	●	1	●	1
5. Take and record patient's temperature by oral method.	●	1	●	1	●	1	●	1	●	1	●	1
6. Take and record patient's temperature by rectal method.	◕	1	◑	1	◕	1	◕	1	◕	3	◕	1
7. Take and record patient's height and weight.	●	1	●	1	●	1	●	1	●	1	●	1
8. Take and record patient's pulse rate.	◕	1	◑	1	●	1	●	1	◕	2	◕	1
9. Take and record patient's respiration rate.	◕	1	◑	1	◕	1	◕	1	◕	2	◕	1
10. Take and record patient's blood pressure.	●	1	●	1	●	1	◕	1	●	1	●	1
11. Prepare an injection tray.	◕	1	◔	1	◑	1	●	1	◑	3	●	1
12. Prepare a tray for routine physical examination and/or special procedures.	◕	1	●	3	◑	1	●	1	◑	2	●	1
13. Prepare a tray for dressing change.	◑	4	●	3	◑	1	◕	1	◑	4	●	1
14. Prepare a catheterization tray.	◑	2	●	3	◑	2	◕	4	◑	2	●	4
15. Prepare a tray to perform a biopsy.	◑	2	●	1	◑	1	●	4	●	1	●	2
16. Assist with minor surgery.	◑	2	●	1	◔	1	●	2	◑	2	●	2
17. Maintain adequate supplies in examination and treatment room.	●	1	●	1	◑	1	●	1	●	4	●	1
18. Dispense medication ordered by physician.	●		●		◑	1	●	1	●	1	●	1
19. Give instructions to patient regarding medication.	●	1	●		◔	1	●	1	●	4	●	1

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED :
1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK ;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :
○ = DO NOT PERFORM ; ◔ = 1 TO 25 % ; ◑ = 26 TO 50 % ; ◕ = 51 TO 75 % ; ● = 76 TO 100 %

JKH

Injections (5 Tasks)

Description

Depending on the nature and purpose of the drugs, there are many methods and forms of administration. The procedure may also be related to the age and condition of the patient. One method of administering medication is injection with a hypodermic needle. Three of the most common types of injections used in a medical office are: (1) intramuscular, (2) subcutaneous, and (3) intradermal. The doctor, of course, decides on the type of drug and dosage to be injected. Some doctors may prefer to give all injections themselves, whereas in other situations the physician will delegate the responsibility to a trained employee. The Survey instrument includes five tasks related to injections. One task, "give patient injection" (task number 5) was intended to cover all types of injections and the other four (tasks 1, 2, 3, and 4) are related to the preparation of medication and instruments, and the preparation of the patient.

Findings

The first four tasks were performed by an average of 57 percent of all respondents except for the ADM-CLs who reported 23 percent performed the task. The highest percentage, by occupational category (91%), was in the RNs, and the second highest (87%) the LPNs. The third highest, the MOA-Gs (68%), was followed by the MOA-Ts with 41 percent and the ADM-CLs (24%).

All categories of physicians' employees indicated they gave patients injections (task number 5) several times a day, except for the ADM-CLs who performed this task once a month of less. The percentage of respondents by occupational category ranged from a high of 94 percent of the RNs to a low of 20 percent for the ADM-CLs. The LPNs were second highest with 85 percent, the MOA-Gs and the MOA-Ts reported 60 percent and 39 percent respectively.

IV. EXAMINATION AND TREATMENT ROOM PROCEDURES (Cont')

B. Injections

Task	RN N=61 %	RN F	LPN N=29 %	LPN F	MOA-T N=15 %	MOA-T F	MOA-G N=79 %	MOA-G F	ADM-CL N=100 %	ADM-CL F	TOTAL N=284 %	TOTAL F
1. Review and confirm doctor's orders to administer an injection.	●	1	●	1	◑	1	◑	1	◔	`	◑	1
2. Prepare medication and supplies for injections.	●	1	●	1	◑	1	●	1	◔	4	●	1
3. Check syringe to see that air bubbles have been ejected.	●	1	●	1	◑	1	◑	1	◔	4	◑	1
4. Prepare patient for injection.	●	1	●	1	◑	1	◑	1	◔	4	◑	1
5. Give patients' injections.	●	1	●	1	◑	1	◑	1	◔	1	◑	1

KEY TO ABBREVIATIONS FOR FREQUENCY (F) 1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK;
TASK IS PERFORMED OR SUPERVISED : 2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS ○ = DO NOT PERFORM; ◔ = 1 TO 25 %; ◑ = 26 TO 50 %; ◕ = 51 TO 75 %; ● = 76 TO 100%
THAT PERFORM OR SUPERVISE THE TASK :

JKH

75

Physical Therapy (7 Tasks)

Description

Various types of equipment, using heat, light, and ultra-sonic means for therapeutic purposes are usually available in a medical office. The physician always prescribes the treatment and may also administer it. In some cases he may delegate these duties, with specific instructions, to one of his employees. He would also exercise close supervision to prevent harmful results that could be caused by overexposure or misuse of equipment.

Five of the seven tasks are related to administering physical therapy using equipment and two tasks are for administering manual massage and assisting patients in doing physical exercises.

Findings

The average percentage of respondents performing physical therapy tasks was approximately 5 percent; the highest percentage (approximately 9%) was reported by the MOA-Ts and the lowest (2%) was reported by the ADM-CL category. "Administer heat treatment," task number 4, was performed by more respondents (10%) than any of the other six tasks; the second largest number (9%) performed "administer ultra-sonic therapy machine" (task number 7). The other tasks were performed by only one to three percent of total respondents.

IV. EXAMINATION AND TREATMENT ROOM PROCEDURES (Cont')

C. Physical Therapy

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Administer manual massage.		3		0		1		4		1		1
2. Help the patient in doing simple physical exercises.		4		0		1		2		4		4
3. Administer hydrotherapy treatment.		1		3		0		3		1		3
4. Administer heat treatment.		2		2		2		2		4		2
5. Administer electrotherapy treatment.		2		0		1		4		0		1
6. Administer light treatment.		4		1		0		4		4		4
7. Administer ultrasonic therapy machine.		2		2		4		2		1		2

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED :

1 = SEVERAL TIMES DAILY ; 3 = DAILY OR SEVERAL TIMES A WEEK ;
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM ; ◔ = 1 TO 25 % ; ◑ = 26 TO 50 % ; ◕ = 51 TO 75 % ; ● = 76 TO 100 %.

First-Aid and Emergency (6 Tasks)

Description

Physicians' employees may encounter situations in a medical office where first aid must be administered immediately while waiting for the physician. The physician's employee should know when to act and what treatment to render; it is therefore important that she know as much as possible about first aid emergency treatment.

Findings

The first two tasks on the survey instrument are related to obtaining help from the physician or another qualified person and the last four tasks relate to specific types of treatment that may be rendered.

Approximately two-thirds of all employees indicated that they were involved daily in describing to the physician the nature of patients' illnesses or injury (task number 2), and seeking help from the physician or qualified nurses with much less frequency. i.e., once a month or less (task number 1). By occupational category there was a similar pattern for both tasks except that the MOA-Gs had 36 percent performing task number 1, and 77 percent performing task number 2; the frequency for both tasks was once a month or less.

The last four tasks (3,4,5, and 6) related to rendering specific first aid treatment, and were performed once a month or less by 44 percent of all respondents. The RNs reflected the highest percentage (56%) and the ADM-CLs the lowest with 17 percent. Between the extremes were the LPNs (47%), MOA-Gs (46%), and the MOA-Ts (28%). For the RNs and LPNs the frequency varied from daily or several times daily depending on the task. For the other categories it was once a month or less for the majority of the tasks.

IV. EXAMINATION AND TREATMENT ROOM PROCEDURES (Cont')

D. First Aid and Emergency

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Seek help from qualified nurse or physician at once.		4		3		4		4		4		4
2. Describe the nature of patient's illness or injury.		1		1		1		4		4		1
3. Take immediate measures to stop bleeding.		3		4		4		4		4		4
4. Administer oxygen to patient.		4		1		4		4		4		4
5. Position patient in safe and comfortable position.		2		1		4		4		4		4
6. Apply proper bandage.		2		2		1		2		4		2

KEY TO ABBREVIATIONS FOR FREQUENCY (F)
TASK IS PERFORMED OR SUPERVISED:

1 = SEVERAL TIMES DAILY; 3 = DAILY OR SEVERAL TIMES A WEEK,
2 = ONCE A WEEK OR SEVERAL TIMES A MONTH; 4 = ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS
THAT PERFORM OR SUPERVISE THE TASK:

○ = DO NOT PERFORM; ◔ = 1 TO 25%; ◑ = 26 TO 50%; ◕ = 51 TO 75%; ● = 76 TO 100%

JKH

Specialty Practice Procedures (13 Tasks)

Description

It has become increasingly difficult for any physician to become an expert in every phase of the practice of medicine. There is an increasing trend to the highly specialized practice of medicine where the physician usually confines his practice to the diagnosis and treatment of diseases falling within the realm of a particular specialty. The practice of specialty medicine even expanded into sub-specialties. For example, a pediatrician may decide to restrict his services to children suffering with heart ailments; or a surgeon may limit his pratice to ortho-pedic problems.

Throughout the survey instrument, the tasks listed under clerical, secretarial, clinical, or technical are related to one specialty or another and many of them overlap. Some of the unique tasks that a physician's employee may perform for a highly specialized practitioner are included in this part of the questionnaire. The list by no means covers the full range of possibilities, though an attempt was made to list the more common tasks performed by a physicians' employees when the doctor is a specialized practitioner.

Findings

Of the total respondents, an average of 25 percent indicated that they performed the tasks listed for specialty procedures. The majority of tasks were performed several times daily or daily.

Within the occupational categories, as one might expect, the LPNs, RNs, and MOA-Gs all reported a large proportion of respondents who performed the duties in this area. The per-centages were: LPNs 37 percent, RNs 36 percent, MOA-Gs 36 percent; the remaining categories were MOA-Ts (25%), and ADM-CLs (9%).

IV. EXAMINATION AND TREATMENT ROOM PROCEDURES (Cont')

E. Specialty Practice Procedures

	RN N=61		LPN N=29		MOA-T N=15		MOA-G N=79		ADM-CL N=100		TOTAL N=284	
	%	F	%	F	%	F	%	F	%	F	%	F
1. Assist physician in performing visual acuity tests.	◐	1	◐	1	◑	1	◑		◑	1	●	1
2. Assist physician in performing hearing acuity tests.	◐	1	◐	2	◑	1	◑	1	◑	3	◕	1
3. Give tests for color blindness.	◐	3	◐	2	◑	2	◑	1	◑	4	◕	2
4. Assist physician in performing scratch test.	◐	3	◐	2	◑	1	◑	3	◑	1	◕	3
5. Assist physician in performing patch test.	◑	2	◐	2	◑	1	◑	3	◑	3	◕	2
6. Explain gynecological procedures to patients.	◐	3	●	1	◑	1	◑	2	◑	4	◕	1
7. Assist physician in performing a cervical cauterization.	◐	3	●	1	◑	2	◑	3	◑	3	◕	3
8. Give instructions to maternity patients.	◐	1	◐	1	◑	1	◑	1	◑	3	◕	1
9. Prepare necessary ingredients for cast.	◐	1	◐	2	◑	1	◑	4	◑	4	◕	4
10. Assist physician in application of cast.	◐	4	◐	1	◑	2	◑	4	◑	4	◕	4
11. Prepare operating room for minor surgery.	◐	2	●	4	◑	2	◑	4	◑	4	◕	2
12. Prepare patient for minor surgery.	◐	2	●	3	◑	1	◑	3	◑	4	◕	2
13. Prepare surgical trays and dressings for minor surgery.	●	2	●	3	◑	2	●	4	◑	3	◕	2

KEY TO ABBREVIATIONS FOR FREQUENCY (F)

TASK IS PERFORMED OR SUPERVISED :

1 · SEVERAL TIMES DAILY ; 3 · DAILY OR SEVERAL TIMES A WEEK ;
2 · ONCE A WEEK OR SEVERAL TIMES A MONTH ; 4 · ONCE A MONTH OR LESS.

KEY TO SYMBOLS FOR PERCENT (RANGE) OF RESPONDENTS

THAT PERFORM OR SUPERVISE THE TASK :

○ = DO NOT PERFORM.   ◔ · 1 TO 25 %.   ◑ · 26 TO 50 %.   ◕ · 51 TO 75 %.   ● · 76 TO 100%

CONCLUSIONS

A summary of the national survey findings by major function and by occupational categories is shown in Table 1 for clerical, secretarial, and administrative functions, and in Table 2 for clinical and technical functions. In addition to the percentage of respondents and frequency (mode) of performance (previously discussed in the data analysis), an average difficulty rating is also designated under column "D." This rating is an arithmetic mean of the level of difficulty based on the respondent's choice of "1" for easy, "2" moderate, and "3" difficult.

A vast majority of the tasks were rated easy; the limited number rated moderate or difficult was not sufficient to reach an average of moderate for any of the functional areas. Therefore, this average was computed to two decimal places to show the relative consensus of the level of difficulty judged by the respondents for each occupational category.

The findings of the survey confirm the well-known fact that physicians' employees are utilized in numerous capacities regardless of background, training, or job title. The findings also indicate that the capacity in which physicians' employees are serving nearly always encompasses both administrative and clinical or technical functions. The main difference, however, is the frequency with which certain tasks are performed by the occupational categories.

The results of the survey further indicate that some differentiations with respect to tasks performed by physicians' employees can be made among job titles and among clusters of job titles that are categorized appropriately. Some respondents representing all five occupational categories were performing tasks in all of the twenty-three functional areas covered by the survey instrument. However, it would not be appropriate to develop a curriculum that includes all functions for all occupational categories because of the extremely low percentage of respondents who performed certain functions. Table 3 indicates those functions performed by 25 percent or more and those with less than 25 percent by occupational category. It would seem appropriate to use this as a dividing line to indicate what functions should be included in a curriculum for each categorized group.

For the RNs, 15 of the 23 functions were being performed by 25 percent or more of the respondents. The functions not performed by this category were: Housekeeping, under "Clerical, Secretarial and Management," and none of the five functions under "Business Office" except Cashiering and Banking. Under "Diagnostic Tests and Procedures," the RNs performed four of the six functions; less than 25 percent were responsible for Hematology and X-ray functions. Under "Examination and Treatment," the RNs reported more than 25 percent responsible for all functions except Physical Therapy.

The LPNs reported 25 percent or more performing all seven functions under "Clerical, Secretarial and Management." Under "Business Office" functions they participated to this extent in two of the five functions, i.e., Billing and Bookkeeping and Cashiering and Banking. Four of the six functions under "Diagnostic Tests and Procedures" were performed by 25 percent or more of the LPNs. These four were Specimens: Obtaining and Handling: Urinanalysis; Microbiology, Pathology and Sterilization; and Electrocardiograms. All the functions under "Examination and Treatment" except Physical Therapy were performed by 25 percent or more of the LPNs.

The MOA-Ts reported 25 percent or more of the respondents performing all seven functions under "Clerical, Secretarial and Management" but none of the five functions under "Business Office." The MOA-Ts were performing all six of the functions under "Diagnostic Tests and Procedures," and except for Physical Therapy, they also performed all the remaining functions under "Examination and Treatment."

The MOA-Gs had 25 percent or more performing all seven functions under "Clerical, Secretarial and Management" and all five under "Business Office." For the functions under "Diagnostic Tests and Procedures," they participated to this extent in all but two of the five functions, i.e., Hematology and X-ray, and under "Examination and Treatment," Physical Therapy was the only one of the five functions that had less than 25 percent performing the tasks in the area.

For the ADM-CL group, 25 percent were involved in all functions under "Clerical, Secretarial and Management" and all functions under "Business Office." As might be expected, this group was involved in the least number of functions under "Diagnostic Tests and Procedures" and under "Examination and Treatment." The only function where 25 percent or more performed under "Diagnostic Tests and Procedures" was Specimens: Obtaining and Handling, and under "Examination and Treatment" the only function was Preparation of Patient and Assisting Physician.

By using the 25 percent or more of respondents who perform the various functions, it will be noted in Table 3 that physicians usually and primarily need assistance in the administrative and business area. Unless the practice can utilize and justify several employees, including technicians and specialists in addition to administrative employees, the more generally trained worker best serves the purpose. Curricula for training physicians' employees should be designed in modular or submodular form according to function. In this manner, an employee (particularly a generalist), or a student could select and complete instructional

modules as needed to attain additional skills that would extend his assisting ability. This approach also provides upward mobility limited only by the needs of the physician and the student's personal goals.

The broad functional classifications indicated by roman numerals on Table 3 represent four specific areas in which completed training would give the student a marketable skill as a physician's employee. In some cases, a physician's needs may be fulfilled by a student or trainee who completes one or several of the instructional modules under each broad categorical function. An example would be a full-time receptionist who undertakes to complete the instructional modules under "I" that are releva   o the reception function. The same situation exists for each of the broad functional areas. In a relatively short period of time, a student would gain specialized or generalized skills that would enhance his role in assisting the physician.

Although it is difficult to obtain results by mail surveys on the intangible characteristics that physicians' employees must have, it is recognized that this is of vital importance and must be included in a curriculum for training physicians' employees. The areas in which instructional materials would be necessary for this purpose would be in-depth coverage of the public and patient relations aspects of a medical practice, patient psychology, proper dress and grooming, medical ethics, medical law, and medical terminology.

TABLE 1A

FUNCTIONAL AREAS	RN N=61			LPN N=29			MOA-T N=15			MOA-G N=79			ADM-CL N=100			TOTAL N=204		
	%	F	D	%	F	D	%	F	D	%	F	D	%	F	D	%	F	D
I. Clerical, Secretarial & Management																		
A. Reception	67	2	1.15	67	2	1.18	56	2	1.22	77	2-1	1.11	76	2	1.20	72	2	1.16
B. Public Relations	53	3	1.25	53	2	1.10	43	2-1	1.25	67	2	1.23	79	2-1	1.25	61	2-1	1.25
C. Secretarial	48	1-3	1.39	48	2-1	1.30	35	2-1	1.26	58	2-1	1.21	61	2-1	1.23	53	2-1	1.24
D. Scheduling Patients	54	2	1.12	61	1	1.20	53	3	1.09	69	1	1.11	64	2	1.14	64	2-1	1.13
E. Medical Records	54	2-1	1.22	62	2	1.30	44	3-4	1.25	66	2	1.20	64	2	1.23	61	2	1.22
F.1 Office Management	47	4	1.49	55	4	1.27	46	4	1.09	61	4	1.34	55	4	1.46	54	4	1.39
F.2 Housekeeping	22	4	1.34	29	4	1.24	26	4	1.16	38	4	1.20	35	4	1.21	31	4	1.22
II. Business Office																		
A. Billing & Bookkeeping	23	2	1.26	40	2-1	1.17	20	2-1	1.18	48	2-1	1.12	57	2-1	1.18	42	2-1	1.18
B. Cashiering & Banking	37	2-1	1.17	26	1-3	1.04	23	1-3	1.00	61	2-1	1.07	70	2-1	1.11	53	2-1	1.10
C. Credit & Collections	20	4	1.48	17	4	1.51	13	4	1.00	41	4	1.52	49	4	1.45	35	4	1.48
D. Payment of Vendor's Bills	20	1-3	1.22	17	4	1.09	13	1-3	1.00	44	3	1.12	52	3	1.12	37	3	1.13
E. Payroll	12	4	1.13	7	4	1.23	9	4	1.00	26	4	1.24	38	4	1.25	23	4	1.23

D = DIFFICULTY
1. EASY
2. MODERATE
3. DIFFICULT

F = FREQUENCY
1. SEVERAL TIMES A DAY
2. ONCE A DAY OR SEVERAL TIMES A WEEK
3. ONCE A WEEK OR SEVERAL TIMES A MONTH
4. ONCE A MONTH OR LESS.

FUNCTIONAL AREAS	RN N=61			LPN N=29			MOA-T N=15			MOA-G N=79			ADM-CL N=100			TOTAL N=264		
	%	F	D	%	F	D	%	F	D	%	F	D	%	F	D	%	F	D
III. Diagnostic Tests & Procedures																		
A. Specimens: Obtaining & Handling	63	2	1.11	68	2	1.04	59	2	1.14	60	2	1.04	25	2	1.04	48	2	1.07
B. Urinalysis	44	2	1.12	43	2	1.06	67	2	1.35	44	2	1.09	9	2-4	1.30	32	2	1.14
C. Hematology	16	2	1.10	20	2	1.15	44	2	1.29	16	2	1.32	5	4	1.14	14	2	1.23
D. Microbiology, Pathology and Sterilization	48	2	1.11	54	2	1.07	33	2-1	1.07	46	2-1	1.21	17	1	1.15	36	2	1.11
E. Electrocardiograms	25	2	1.13	42	2	1.12	50	2	1.09	28	2	1.16	10	3	1.09	23	2	1.13
F. X-Ray	17	1	1.19	21	2	1.14	74	2	1.27	22	2	1.20	7	4	1.62	17	2	1.24
IV. Examination & Treatment																		
A. Preparation of Patient and Assisting Physician	76	2	1.07	77	2	1.07	38	2	1.08	63	2	1.09	27	2-1	1.17	52	2	1.09
B. Injections	91	2	1.08	87	2	1.06	41	2	1.14	66	2	1.05	23	4	1.11	56	2	1.07
C. Physical Therapy	6	1	1.49	6	1	1.00	8	2	1.07	9	1-4	1.74	2	4	1.25	5	1-4	1.40
D. First Aid & Emergency Treatment	56	1	1.36	47	2	1.23	28	4	1.74	46	4	1.34	17	4	1.43	44	4	1.37
E. Specialty Procedures	36	2-1	1.16	37	2-1	1.17	25	2	1.20	36	2-1	1.11	9	4	1.18	25	1	1.15

F = FREQUENCY
1. SEVERAL TIMES A DAY
2. ONCE A DAY OR SEVERAL TIMES A WEEK
3. ONCE A WEEK OR SEVERAL TIMES A MONTH
4. ONCE A MONTH OR LESS

D = DIFFICULTY
1. EASY
2. MODERATE
3. DIFFICULT

TABLE 2

FUNCTIONS PERFORMED BY 25% OR MORE AND LESS THAN 25% OF RESPONDENTS

BY OCCUPATIONAL CATEGORY

FUNCTIONAL AREAS	RN	LPN	MOA-T	MOA-G	ADM-CL
I. Clerical, Secretarial & Management					
A. Reception	X	X	X	X	X
B. Public Relations	X	X	X	X	X
C. Secretarial	X	X	X	X	X
D. Scheduling Patients	X	X	X	X	X
E. Medical Records	X	X	X	X	X
F.1 Office Management	X.	X	X	X	X
F.2 Housekeeping	O	X	X	X	X
II. Business Office					
A. Billing & Bookkeeping	O	X	O	X	X
B. Cashiering & Banking	X	X	O	X	X
C. Credit & Collections	O	O	O	X	X
D. Payment of Vendors' Bills	O	O	O	X	X
E. Payroll	O	O	O	X	X
III. Diagnostic Tests & Procedures					
A. Specimens: Obtaining & Handling	X	X	X	X	X
B. Urinalysis	X	X	X	X	O
C. Hematology	O	O	X	O	O
D. Microbiology, Pathology & Sterilization	X	X	X	X	O
E. Electrocardiograms	X	X	X	X	O
F. X-Ray	O	O	X	O	O
IV. Examination & Treatment					
A. Preparation of Patient & Assist Physician	X	X	X	X	X
B. Injections	X	X	X	X	O
C. Physical Therapy	O	O	O	O	O
D. First Aid & Emergency Treatment	X	X	X	X	O
E. Specialty Procedures	X	X	X	X	O

X = 25% or more
O = Less than 25%

APPENDIX A

ALLIED HEALTH PROFESSIONS UNDER CONSIDERATION BY THE UCLA ALLIED HEALTH PROFESSIONS PROJECT

I. FACILITY SUPPORT SERVICES

1. *Admitting office*

   Supervising admitting worker (Oe 14.0406; DOT 237.368-010)**

   Admitting Worker (DOT 237.368-018, 237.368-030)

   Patient Service Representative

2. *Business Office*

   Hospital business office manager (DOT 169.168-062)

   Cashier (OE 14.0103; DOT 211.368-010)

   Account Clerks

   Hospital credit and collection worker (OE 14.0199; DOT 240.388-101)

3. *Central Service*

   Central Service Technician (Central Service Helper) (OE 07.0905; DOT 223.887-010)

4. *Engineering Maintenance*

   Emergency and/or disaster specialist (OE 07.09070)

5. *Environmental Sanitation*

   Community Sanitation (Public Health Department (OE 07.0701, 07.0702, 07.0703; DOT 199.187-010, 168.287-094)

   Health Care Facility Sanitation

   Food Sanitation and Kitchen Safety Program (OE 07.0799, 07.0907)

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*Occupations marked with an asterisk are now being developed.

**U.S. Office of Education (OE) occupational code designations (six-digit) and occupational categories shown in the Dictionary of Occupational Titles (DOT) of the U.S. Department of Labor (nine-digit) are given where available, following each Project occupational category.

6. *Food Service (Dietary)*

   Food Service Supervisor (OE 07.0908, 09.0203; DOT 319.138-010)

   Dietary Technician

   Food Service Worker (OE 09.0203; DOT 317.887-010)

7. *Housekeeping* (OE 17.1100, 09.0205; DOT 187.168-050)

8. *Laundry and Linen* (OE 17.1602)

9. *Medical Records*

   Medical Record Technician (DOT 249.388-034)

   Transcriptionist

   Coding clerk

   File clerk

10. 10. *Pharmacy*

    Pharmacy Technician

    Pharmacy Aide

11. *Purchasing*

    Buyer (DOT) 162.158-102, 162.168-026, 162.188-010)

    Assistant Purchasing Agent (DOT 162.158-102, 162.168-026, 162.188-010)

12. *Ward Administration*

    Ward Manager

    Ward Clerk (DOT 219.388-286)

II. CLINICAL OCCUPATIONS

1. *Bioelectrical Monitoring*

   ECG (Electrocardiographic) Technician (OE 07.0902; DOT 078.368-018)

   EEG (Electroencephalographic) Technician (OE 07.0901, 16.0302; DOT 078.368-022)

   EMG (Electromyography) Technician

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*Occupations marked with an asterisk are now being developed.

2. *Biomedical Photography*

    Biomedical Photography Technician (OE 17.0901)

3. *Dental Occupations*

    Dental Assistant (OE 07.0101; DOT 079.378-010)

    Dental Hygienist (OE 06.0301, 07.0102; DOT 078.368-014)

    Dental Laboratory Technician (OE 07.0904; DOT 079.368-022, DOT 712.381-014)

4. *Medical Assistant*

    Medical Office Assistant (OE 07.0904; DOT 079.368-022, 201.368-014)

    Special Assistants

    Gastroenterology Assistant

5. *Medical Laboratory Functions*

    Medical Laboratory Technician (OE 07.0203, 16.0303; DOT 078.281-018)

    Certified Laboratory Assistant (CLA) (OE 67.0203; DOT 078.381-010)

    Laboratory Aide

    Cytotechnologist

    Histologic Technician (OE 07.0202; DOT 078.381-018)

6. *Nursing Occupations*

    Registered Nurse (Technical) (OE 07.0301, 16.0305; DOT 075.378-014)

    Licensed Vocational/Practical Nurse (OE 07.0302; DOT 079.378-026)

    Nursing Assistant

    Operating Room Technician (OE 07.0305; DOT 079.378-042)

_____

*Occupations marked with an asterisk are now being developed.

Obstetrical Technician   (OE 07.0306; DOT 079.378-026)

Psychiatric Aide   (OE 07.0304; DOT 355.378-042)

7. Radiologic Technology

*Diagnostic Technician   (OE 07.0501, 16.0304;
DOT 078.368-030)

*Therapeutic Technician   (OE 07.0502; DOT 078.381-014)

8. Respiratory Care Functions

Cardiopulmonary Technician

*Inhalation Therapy Technician   (OE 07.0903;
DOT 079.368-018)

9. Social Service Occupations

*Community Health Aide   (OE 07.0906)

*Community Mental Health Aide   ((OE 07.0801)

*Health Assistant (Aide)

10. The Therapies

Occupational Therapy

*Occupational Therapy Assistant   (OE 67.0401;
DOT 079.368-026)

*Occupational Therapy Aide

Orthotics

Orthotic Technician   (OE 07.0404; DOT 712.281-018)

Physical Therapy

Physical Therapy Assistant   (OE 07.0402; DOT 355.878-014)

Physical Therapy Aide

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*Occupations marked with an asterisk are now being developed.

APPENDIX B

MEDICAL OFFICE ASSISTANTS SURVEY RESPONDENTS
BY JOB TITLE WHICH THEY INDICATED

Job Title	Number of Respondents
1. Medical Assistant	47
2. Medical Secretary	43
3. Office Managers and Supervisors	21
4. Receptionist	16
5. PBX Operator	1
6. Bookkeeper	1
7. Secretary	1
8. Registered Nurse	46
9. Licensed Professional Nurse (or L.V.N.)	24
10. Laboratory Technician	3
11. Laboratory Technologist	5
12. Radiologic Technologist	3
13. Registered Ophthalmic Medical Assistant	1
14. Physician's Assistant	14
15. Pediatric Nurse Assistant (R.N.)	4
16. Nurse Aide	1
17. Orthopedic Assistant	1
18. Pediatric Aide	1
19. Medical Assistant — Medical Secretary	7
20. Secretary — Bookkeeper	2

	Job Title	Number of Respondents
21.	Secretary – Bookkeeper	2
22.	Laboratory Technician – Doctor's Assistant	1
23.	Secretary – Receptionist – Bookkeeper	3
24.	Office Nurse – Receptionist – Bookkeeper	1
25.	R.N. – Receptionist – Bookkeeper	1
26.	L.P.N. (L.V.N.) – Certified Operating Room Technician	1
27.	R.N. – Secretary – Receptionist	3
28.	Office Manager – Bookkeeper	2
29.	Receptionist -- Insurance Clerk	1
30.	Receptionist – Bookeeper	1
31.	R.N. – Office Manager	3
32.	Secretary – Office Supervisor	2
33.	Secretary – Receptionist	3
34.	Secretary – Clerk Typist – Insurance Clerk	1
35.	Medical Assistant Manager	4
36.	Medical Assistant – X-Ray team	1
37.	Office Manager – Medical Secretary	1
38.	R.N. – Executive Assistant	1
39.	Administrative – Medical Assistant	2
40.	R.N. – Medical Assistant	1
41.	Administrative Assistant – Office Manager	1
42.	Patient Counselor and Surgical Assistant	1
43.	Staff R.N.	2
44.	Office Assistant (L.P.N./L.V.N.)	2
45.	Medical Assistant – Medical Technician	2
46.	No job title indicated	8
	Total respondents	.292

APPENDIX C

Allied Health Professions Project
Division of Vocational Education
University of California, Los Angeles

Medical Office Survey

This is part of a project to develop new courses of study and instructional materials for persons in the allied health professions. To find out what should be taught and how best to teach it, we must find out what tasks or functions really are performed by persons such as you who are working in the field.

Your name has been provided to us by the AAMA and approval received from the appropriate officials to request your participation in this survey. Your cooperation in completing the Background Information Sheet and the questionnaire and returning them within two weeks will be appreciated.

All information is strictly confidential. Your identification card will be kept separate from your answers to the questionnaire. Answers will be prepared for data processing and results will be reported by group only, not by individual.

Respondent I.D. Number

APPENDIX C

Allied Health Professions Project
Division of Vocational Education
University of California, Los Angeles

Medical Office Survey

This is part of a project to develop new courses of study and instructional materials for persons in the allied health professions. To find out what should be taught and how best to teach it, we must find out what tasks or functions really are performed by persons such as you who are working in the field.

Your doctor-employer has sent us your name as a respondent to our national Medical Office Survey. Your cooperation in completing the Background Information Sheet and the questionnaire and returning them within six weeks will be appreciated.

All information is strictly confidential. Your identification card will be kept separate from your answers to the questionnaire. Answers will be prepared for data processing and results will be reported by group only, not by individual.

Respondent I. D. Number

APPENDIX C
SURVEY DIRECTIONS

Read each task statement in the list. If you perform the task in your job, place a check mark in the first column after the statement. If you supervise performance of the task by other persons, place a check mark in the second column.

For each task that you *perform* (and have checked in the first column), place an X mark in one of the squares of the Frequency column and in one of the squares of the Difficulty column to indicate your answers to the following questions:

A. *Frequency:* How often do you perform this task?

     1. Several times a day
     2. Once a day or several times a week
     3. Once a week or several times a month
     4. Once a month or less often

B. *Difficulty:* How difficult is this task?

     1. Easy: You follow a standard procedure that does not require any decisions; you never have to consult a procedure manual or a supervisor.

     2. Moderate: You have to select the most suitable procedures to fit different conditions or situations; you sometimes have to consult a procedure manual or a supervisor.

     3. Difficult: You encounter problems that may require changes in procedures or the use of new procedures; you usually have to consult a procedure manual or a supervisor.

APPENDIX D

BACKGROUND INFORMATION SHEET
MEDICAL OFFICE SURVEY
THIS IS A CONFIDENTIAL DOCUMENT IDENTIFIED BY NUMBER ONLY.
THIS INFORMATION WILL BE USED FOR RESEARCH PURPOSES ONLY.

Please complete this Information Sheet and return it with the survey form. The answers to these questions are of importance as we try to evaluate responses from a large number of people across the United States where educational, licensure, and certification requirements for specific jobs may be very different.

1. Your position title _____

2. Circle: Private Office   Group Practice   Clinic

   2.1   Number of Doctors in Office: _____   2.2   Medical Specialty(ies):

   2.1a Number of Non-Doctor   _____ 0
       Employees in Office: _____

   2.2   Radiology Procedures: _____

      2.21 Performed within office: Routine_____   2.22 All Procedures _____

      2.23 By outside service: _____

   2.3   Laboratory Procedures:

      2.31 Performed within office: Routine_____   2.32 All Procedures_____

      2.33 Performed by outside laboratory_____

3. Years in present position_____

4. Years in occupation_____

5. Previous occupation_____

6. Years in previous occupation_____

7. Age_____   8. Sex (circle)   M   F

9. Highest school grade completed (circle one):

less than   more than

   8   8   9   10   11   12   12

10. Highest academic level completed (circle one):

    10.1 Less than high school diploma

    10.2 High school diploma or equivalent

    10.3 Some college (no degree)

    10.4 Associate degree

    10.5 Bachelor's degree (major) _____

    10.6 Master's degree   (major) _____

    10.7 Other (specify) _____

11. Technical or other training programs, circle code numbers and include number of months. If program was completed, indicate by check mark.

	No. of Months	(✓) Completed	Area or Subject
11.1 None	_____	_____	_____
11.2 On-job or apprenticeship	_____	_____	_____
11.3 Military courses	_____	_____	_____
11.4 Manufacturers' courses	_____	_____	_____
11.5 Vocational School	_____	_____	_____
11.6 Other courses	_____	_____	_____

12. Certificates, licenses or registrations held (specify):

_____

13. Are you employed full time in your present position? (circle)   YES   NO

    13.1 If part time, indicate percent of full time and rate of pay:

        Percent_____   Hourly_____   Weekly_____   Monthly_____

14. Present yearly salary for full time employment (circle one):

    14.1 less than $2,000   14.5 $8,000 – 9,999

    14.2 $2,000 – 3,999   14.6 $10,000 – 11,999

    14.3 $4,000 – 5,999   14.7 $12,000 – 15,000

    14.4 $6,000 – 7,999   14.8 more than $15,000

January 7, 1971
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APPENDIX E

SAMPLE OF QUESTIONNAIRE

Step one: Read all tasks on this page, check those tasks which you perform or supervise.

Step two: For those tasks checked in step one, indicate with an "x" the frequency and difficulty of performance.

Blank spaces are for other tasks that you perform or supervise.

FREQUENCY ☒ — How often do you perform this task?
- Several times a day
- Once a day or several times a week
- Once a week or several times a month
- Once a month or less

DIFFICULTY ☒ — How difficult is this task?
- Easy
- Moderate
- Difficult

Column headings: Check if you perform this task / Check if you supervise performance of this task

I. CLERICAL, SECRETARIAL AND MANAGERIAL

A. Reception of Patients and Visitors

#	Task	Perform	Supervise	Frequency	Difficulty
1.	Greet patient and confirm appointment date and time.	☐	☐	1 2 3 4	1 2 3
2.	Interview new patient to complete a registration form.	☐	☐	1 2 3 4	1 2 3
3.	Interview patient for insurance or other third party sponsorship information.	☐	☐	1 2 3 4	1 2 3
4.	Instruct new patient to complete registration form.	☐	☐	1 2 3 4	1 2 3
5.	Obtain signature for assignment of insurance payment to doctor and signature authorization for release of information.	☐	☐	1 2 3 4	1 2 3
6.	Complete a "multi-purpose" patient visit form.	☐	☐	1 2 3 4	1 2 3
7.	Explain to waiting patients what delay to expect when running behind schedule.	☐	☐	1 2 3 4	1 2 3
8.	Escort patient to examination or treatment room.	☐	☐	1 2 3 4	1 2 3
9.	Interrupt scheduled appointments for an emergency and explain circumstances to waiting patients.	☐	☐	1 2 3 4	1 2 3
10.	Screen visitors and salesmen requesting to see doctor.	☐	☐	1 2 3 4	1 2 3
		☐	☐	1 2 3 4	1 2 3
		☐	☐	1 2 3 4	1 2 3
		☐	☐	1 2 3 4	1 2 3

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│           ALLIED HEALTH PROFESSIONS PROJECTS               │
│                                                            │
│            Principal Investigator Director                 │
│               Dr. Melvin L. Barlow                         │
│          Elinor Sheridan, Administrative Asst.             │
│          Lucille Patenaude, Executive Asst.                │
│                                                            │
│                  Acting Director                           │
│               Dr. Miles H. Anderson                        │
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│   Executive   │   │   National   │
│   Committee   │   │   Advisory   │
│   │   │   Committee   │
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ALLIED HEALTH PROFESSIONS PROJECT	SUPPORTIVE SERVICES UNIT	SECONDARY SCHOOLS PILOT & DEMONSTRATION PROJECT
Thomas E. Freeland, Ph.D. *Deputy Director*	*Project Coordinating Assistant* Carol Tripp	William Hudson, B.A. *Deputy Director*
Associate Directors O. Earl DiCicco, B.S. *(Facility Support)* Minna Gosman, M.P.H. *(Medical Records - Food Service)* Howard Taub, M.T., M.S. *(Clinical Laboratory)* Lucile A. Wood, R.N., M.S. *(Nursing)*	*Editorial Staff* Mary Ellison Sylva Grossman Seba Kolb	*Field Coordinators* Gregory Threadgill, B.S. Larry Hagmann, M.S. Jeffrey Reyes, M.A. Barbara Rosenquist, Ph.D. *Research Analyst*
Research Associate T. D. Cullen, Ph.D.	*Secretarial Staff* Margaret Campbell Melanie Herrick Marianne Hester Charilyn Johnston Ellen Wiener	Clarence Fielstra, Ph.D. *Evaluation Specialist* Jerome Epstein, M.A. *Writer*
	Illustrator John Harris	

┌─────────────────────────────┐   ┌───┐
│   National Technical   │   │   CONSULTANT   │
│   Advisory Committees   │   │   Diane E. Watson, M.S.   │
│   (Representative of   │   │ *Specialist in Health Occupations*   │
│   National Professional   │   │   Bureau of Industrial Education   │
│   Organization &   │   │ California State Department of Education   │
│   Service Consumer Groups) │   │   Judy Dobson, *Secretary*   │
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