

DIMENSIONS OF THE "EXPANDED ROLE OF THE NURSE"
AS PERCEIVED AT THE UNIVERSITY OF
OREGON MEDICAL CENTER

by

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A FIELD STUDY

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CHAPTER I

INTRODUCTION

Introduction to the Problem

A suggested approach to the improvement of health care delivery is better utilization of the nurse in an expanded role. Since the late 1950's medical groups in various parts of the country have established out-patient clinics in which nurses assume responsibilities usually reserved for physicians. These responsibilities vary from institution to institution and include activities such as history taking, ordering of diagnostic laboratory tests, performing physical examinations, and prescribing minor treatments. Persons assuming these functions carry a variety of role titles that reflect the interests and professional preparation of the person in the role. The diversity of activities and role titles has produced confusion within the nursing and medical professions. This paper is addressed to the problem of these diverse activities.

Problem and Purpose

This author developed an expanded role of the nurse which was innovative at the University of Oregon Medical Center. The role title assumed was physician's associate, which implies that the author is

a member of the medical profession with some but not all of the privileges of the medical profession (15). The functions that the physician's associate was to perform were not clearly defined. This descriptive field study was therefore designed to develop a tool for identifying the dimensions of the physician's associate role, and to study the perceptions of this role held by the professionals with whom the author worked at the University of Oregon Medical Center.

Setting of Study

The author was assigned to work with one medical resident for the period of one academic year for the purpose of gaining collaborative clinical experience. The objectives of this assignment, as set up by the student with the consent of her instructor, the physician in charge of the clinics, and the involved medical resident were:

1. To develop a physician-nurse relationship in the clinical situation by taking an active part in a team approach to patient care.
2. To increase the application of knowledge of nursing, medical, psychological, social, and biological sciences in planning and implementing nursing care for the patient with chronic medical illness by:
 - a. Utilizing appropriate interviewing techniques,
 - b. Performing screening examinations,

- c. Recording pertinent medical data using the Problem Oriented Medical Record Approach,
 - d. Developing an ongoing evaluative nursing plan for each patient.
3. To promote patient participation in long term medical treatment by consultation with patients in the hospital, clinic, and home.
 4. To teach prevention and early recognition of complications of specific chronic diseases and their treatments by giving individualized teaching conferences to each patient.
 5. To manage the ordinary emotional adjustments of the stress of illness through interviewing and therapeutic listening.

The author's time was spent in three different clinical settings. Three mornings a week were devoted to rounds with the medical team and to individualized patient teaching in the hospital ward. One morning a week was spent managing or participating in the care of stabilized chronically ill patients in the general medical clinic. One morning a week was spent making patient home visits. The author worked directly with the resident and followed his 2 month rotations to a general medical unit, a cardiac ward, and a coronary care unit. The hospital setting varied with the resident's scheduled rotations. The weekly clinic experience was the same throughout the academic year.

Survey of the Literature

A search was made in the literature for the reports of studies related to the physician's associate role. Studies indicated that early attempts to define this emerging role took place on both local and national levels. The first attempt noted was on a local level.

In the early 1960's a study of seven out-patient departments in the Boston, Massachusetts area was made by the staff of the Human Relations Center at Boston University. Their published reports recommended that roles in clinics be redefined (4). One of the institutions that took part in this study was the Massachusetts General Hospital. Dr. J. Stoeckle, chief of the medical clinic, proposed a program in 1961 for expanding the role of the nurse in the care of ambulatory patients. By 1966 the medical nurse who had been a part of the program since its inception carried primary medical responsibility for 300 chronically ill patients (8).

In 1963 Connelly and Stoeckle published a descriptive study of the effectiveness of the program in Boston. Task allocation and its acceptance by patients and professionals was analyzed. They observed that patients had high acceptance of the nurse in her new role in the out-patient clinic, and found that this was substantiated by good attendance records and a negligible number of drop-outs (32).

National investigations of role changes became apparent soon

after the Boston study was published. In 1963 the report the Surgeon General's Consultant Group on Nursing resulted in a national investigation of nursing education, roles, and functions. By 1968 Congress had created the National Center for Health Services Research and Development within which manpower training programs were established, and a series of specially designed projects related to 'physician extender personnel' were initiated.

Lewis and Resnik opened a 'nurse clinic' in the out-patient department of the University of Kansas in 1964. Their studies indicated that the nurses handling this clinic had a positive influence on the attitudes and preferences of patients for medical management by the nurses. The significant changes in patient attitudes they reported were that in the nurse clinics (as compared to the physician clinics) there was "... an increased adherence to appointment schedules, better utilization of time as demonstrated by time and motion studies, and a reduction in the overall cost of the program on a dollar basis" (20). Patients in the nurse clinics also exhibited a decreased frequency of physical complaints.

In 1969 Reed and Roghman surveyed the attitudes of nurses and physicians toward the expanded role of the nurse at the University of Rochester School of Medicine in New York. The results suggested that "... younger personnel who have not been indoctrinated with rigid role perceptions tend to be most receptive to the role change" (29).

Although the expanded role of the nurse has been demonstrated in many parts of the country for the past eleven years, there is evidence that certain obstacles within the health professions are hindering its success. One of these obstacles is that the administrative aspects of nursing tend to keep nurses away from patients (3). Another is the lack of courses that provide for the acquisition of skills necessary for collaborative clinical work with physicians. This latter problem is being positively dealt with, and there are now numerous educational programs set up around the country (30).

Another basic obstacle to the development of the new role is the resistance by both the nursing and medical professions to a change in allocation of responsibility. Bates (3) stated that the "... inter-professional relation characterized by medical authoritarianism and nursing's dependency blocks realization of the full potential of the doctor-nurse team." Although medicine and nursing have the common goals of preservation of health, each attempts to achieve these goals in different ways. Bates portrays them as two overlapping circles and sees a common area of responsibility that could be shared.

The clinical settings in which nurse and doctor work together vary greatly, ranging from doctors' offices, to expansive hospitals and out-patient clinics. The only report found in the literature which related specifically to the perception of common areas of

responsibility was Lewis and Resnik's study (21) of nurse-patient interactions in an out-patient department. The description of the nurses' activities indicated that they were engaged primarily in supportive role functions, rather than the technical diagnostic and therapeutic activities. The frequency distribution of activities documented that the nurse was basically concerned with psychological perceptions and support, professional manner, history taking, and review of problems. Specific evaluation of physical findings and initiation of a treatment were barely mentioned by Lewis and Resnik but had been strongly suggested by the Boston group (8).

Through the development of a tool that could define the dimensions of the physician's associate role, the author hoped to identify the roles most closely linked with the physician's associate and the functions perceived most appropriate for the physician's associate. The author was also interested in comparing the differences in perceptions of the physician's associate role held by the doctors who worked with the physician's associate. Another aspect of the problem to which the study addressed itself was the influence of student activism in the mid 1960's. Students began to resent their roles and to question the models and methods of their professors (24). A comparison of the responses of those professionals who graduated from their basic training before 1965 was made with those

professionals who graduated after 1965 to see if there was any difference in role perception between these groups.

CHAPTER II

METHODOLOGY

Development of the Tool

In an attempt to define the dimensions of the role in a specific setting, one first needs to look at some of the common theoretical descriptions that relate to a role in general. According to Kelly, "A role is an ongoing pattern of behavior that follows a person's understanding of how others who are associated with him in his task think" (17). In other words, when one plays a role one behaves according to what he assumes to be the expectations of others.

From a Social Learning Theory point of view the term role is not used, but the theory states that "one of the major predictors of behavior is the outcome of behavior in a given situation" (27). This theory uses the construct of expectancy to mean that a particular reinforcement will occur as a function of a specific behavior in a given situation. Thus, a person's expectancies in a specific setting may determine his role.

According to Laing and Phillipson (18):

The human being learns how to structure his perceptions as a subsystem interplaying with its own contextual sub-culture, related institutions, and overall larger culture... Experience in all cases entails the perception of the act and the interpretation of it.

Therefore a person's behavior is a result of his integration of the perceptions of his acts by the society within which he functions, and by himself.

It becomes apparent that one's perception and development of one's role are validated in terms of the expectations of the persons with whom one functions in that role. This study is an attempt to identify the perceptions and expectancies of those people who worked with the physician's associate.

Kelly devised a Role Construct Repertory Test based on his psychology of dichotomous constructs. Kelly's method takes three elements in which the respondent is asked to decide how two elements are alike and different from the third. Next the person identifies the manner in which the similar elements are alike and the manner in which the third differs. Kelly used this method to describe the dimension of the roles within which a person functions.

The author decided to adopt Kelly's method to develop a tool to elicit respondents' perceptions of the physician's associate role. Fourteen professional roles with which the physician's associate had the most contact were listed on an overlay sheet (see Appendix A). On Part I of the tool, 14 columns representing the roles were divided by 24 rows. Three circles were placed in each row. The circles designated the three roles that the author wanted to be compared. Aligned with each row was a line on which to write the function that

made two of the roles more alike and different from the third, and a line was provided on which to write the manner in which the third role differed from the other two. X's were to be placed in the circles that represented the two similar roles.

Part II of the tool had the same format as Part I but was designed to obtain reactions toward the functions the author perceived herself actually performing as physician's associate. Functions were listed on the line adjacent to each row. The respondents were asked to indicate the roles which would primarily perform the function by placing circles in the three most appropriate columns. The respondents were also asked to indicate other roles which might also perform the function by placing check-marks in the appropriate columns. This test was entitled the Physician's Associate Role Perception Test.

Definitions

The following terms as defined by Kelly (17) were utilized in this paper:

Dichotomous construct - a way in which at least two elements are similar and contrast with a third. These constructs are listed on the Physician's Associate Role Perception Test as "Functional Similarities" and "Functional Dissimilarities."

Linked - the association of any construct or constructs with a given role.

Paired - a term used in reference to the choice of two roles out of three being perceived as more alike.

Permeability - the range of roles to which a given construct is applicable.

Sort - the comparison of three designated roles.

Pilot Study

The Physician's Associate Role Perception Test was administered to eight students in the graduate program at the University of Oregon School of Nursing. The purposes of this pilot study were to determine: 1) clarity of instructions of the tool; 2) validity of the tool; and 3) length of time required to take the test. The test was given to all of the students at the same time.

As a result of the students' comments following the administration of the test, a number of changes were made in the tool. To clarify the instructions and improve understanding the following changes were made: the overlay sheet was eliminated so that roles could be written directly on Parts I and II; the label of "Constructs" was changed to "Functional Similarities" and "Functional Dissimilarities"; and nine of the functions listed on Part II were reworded. It was also suggested that the role of nursing supervisor be added to the list of roles compared. It was thought that a hospital administrator's influence on opportunities for trying new roles might shed light on the physician's associate role from a different perspective. Another

suggestion was a reordering of the sorts on Part I so that a comparison of the same two roles would not be sequential.

The pilot study revealed that it required the subjects to take one and one-half hours to answer the test. Attempts were made to shorten the time required by shortening the tool. The four roles least often associated with the physician's associate were eliminated, and the number of sorts was decreased from 45 to 40. Forty sorts were kept in the tool due to Hunt's preliminary studies of the Role Construct Repertory Test in which he "...found evidence for believing that by the time a subject has made 40 sorts of given figures he has expressed nearly all of the constructs which will have been expressed when he reaches his eightieth sort" (17).

It was important to see if the tool actually elicited the perceptions of the physician's associate role in a consistent manner. The results of the test were examined as to: 1) the perceived roles linked with the physician's associate; 2) the perceived functions of the physician's associate; and 3) the percentage of agreement for the assignment of the physician's associate to selected functions. A table was constructed to summarize the data for each of these points. (See Appendix B.) The validity was substantiated.

As a result of these developmental efforts, the tool which is shown on the following three pages was devised for this study.

INSTRUCTIONS
PHYSICIAN'S ASSOCIATE ROLE PERCEPTION TEST

This test is designed to help the examiner to understand your role and roles of others with whom you work.

PART I.

Note that each vertical column represents the role stated at the top.

Now note that each horizontal row of squares has three circles in it. Look at the top row. Consider the three roles signified. Are two of them alike in function in some important way that distinguished them from the third? Keep thinking about them until you remember the important way in which two of them are alike and which sets them off from the third.

When you have decided which two it is, and the important way in which they are alike, put an 'X' in the two circles corresponding to the two that are alike. Do not put any mark in the third circle.

Now write in the blank under "Functional Similarity" the word or short phrase that tells how these two are alike. Next write in the blank under "Dissimilarity" what you consider to be opposite of this characteristic.

Proceed to the rest of the rows in the same manner.

PART II.

Note that the "Functional Similarity" spaces are already filled in.

In each horizontal row of squares place three circles in the most appropriate squares.

Place check marks (✓) in the squares corresponding to others who might also perform the role.

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION!

PART I.

	1	2	3	4	5	6	7	8	9	10	11
INTERN	<input type="checkbox"/>										
RESIDENT	<input type="checkbox"/>	<input type="checkbox"/>									
HEAD NURSE			<input type="checkbox"/>								
HOS. STAFF NURSE			<input type="checkbox"/>								
CLINIC NURSE				<input type="checkbox"/>							
ICU OR CCU NURSE					<input type="checkbox"/>						
PHYS. ASSOC. NURSE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SOCIAL WORKER								<input type="checkbox"/>			
MEDICAL STUDENT		<input type="checkbox"/>	<input type="checkbox"/>							<input type="checkbox"/>	
PUBLIC HEALTH NURSE								<input type="checkbox"/>			<input type="checkbox"/>
NURSING SUPERVISOR									<input type="checkbox"/>		

FUNCTIONAL SIMILARITY

A																			
B																			
C																			
D																			
E																			
F																			
G																			
H																			
I																			
J																			
K																			
L																			
M																			
N																			
O																			
P																			
Q																			
R																			
S																			
T																			

DISSIMILARITY

PART II

ROLE: _____

YEAR COMPLETED BASIC PREPARATION FOR YOUR PROFESSIONAL ROLE: _____

YEAR OF MOST RECENT FORMAL EDUCATION IN YOUR FIELD: _____

FUNCTIONAL SIMILARITIES

Teaches patient regarding diet

Teaches patient regarding meds

Carries out research

Deals with patient's family problems

Writes assessment on progress notes

Interprets heart and lung sounds

Orders necessary lab work

Renews prescriptions

Decides when patients should return for check-ups

Analyzes physical findings

Helps arrange for patient discharge

Oversees patient in a variety of settings

Assesses stabilized chronically ill patients in clinics

Performs physical exams

Teaches health maintenance

Meets the usual emotional needs of patient

Alters medical management in the out-patient clinic

Makes patient home visits

Makes decisions regarding isolation of an infected patient

Emphasizes therapeutic listening in patient care

1	INTERN																			
2	RESIDENT																			
3	HEAD NURSE																			
4	HOS. STAFF NURSE																			
5	CLINIC NURSE																			
6	ICU OR CCU NURSE																			
7	PHYS. ASSOC. NURSE																			
8	SOCIAL WORKER																			
9	MEDICAL STUDENT																			
10	PUBLIC HEALTH NURSE																			
11	NURSING SUPERVISOR																			

Selection of Study Population

The criteria for selection of subjects to participate in the study included: a) membership of the staff in the clinical settings, b) type of professional training, and c) year of graduation from basic preparation.

The first criterion, membership of the staff in the clinical settings, was used so that the three different facilities in which the author had worked as physician's associate would be represented. Different functions had been performed in each location, therefore inclusion of perceptions of staff members in each area was necessary to gain an over-all view of the role. This distribution is summarized in Table 1.

Table 1. Distribution of Study Population by Location and Profession

Role	Clinic	V. A. hosp.	County Hosp.
Intern		1	1
Resident	1	1	
Head nurse	1	2	
Staff nurse		3	1
Clinic nurse	2		
CCU nurse		2	
Physician's associate	1		
Social worker	3		
Medical student		2	1
Public health nurse			1
Nursing supervisor		2	
Professor of medicine	1	1	1
Total	9	14	5 = N of 28

Although the physician's associate and one of the residents had functioned in all three areas, they are listed only in the clinic. This was done to avoid the overweighting of their responses to the perceptions.

The second criterion for selecting the study population was professional training background. Only representatives of the categories of professions whose perceptions would be based on knowledge of the field of nursing were taken. Because the role is thought most to overlap the sphere of nurses and doctors, a representative sampling of each was sought. Table 2 summarized this distribution.

Table 2. Distribution of Nurses and Doctors in Study Population

Role	Nurses	Doctors
Intern		2
Resident		2
Head nurse	3	
Staff nurse	4	
Clinic nurse	2	
CCU nurse	2	
Physician's associate	1	
Medical student		3
Public health nurse	1	
Nursing supervisor	2	
Professor of medicine		3
Total	15	10

Thirdly, selection of the study population was based on the year of graduation from basic training. Reed and Roghman (29) had indicated that younger people had less rigid role perceptions. This author wanted to see if this finding could be reproduced. Table 3 summarized this distribution in the study population.

Table 3. Distribution of Study Population by Year of Graduation from Basic Preparation

Role	Before 1965	After 1965
Intern		2
Resident		2
Head nurse	3	
Staff nurse	4	
Clinic nurse	2	
CCU nurse	2	
Physician's associate	1	
Medical student		3
Public health nurse	1	
Nursing supervisor	2	
Professor of medicine		3
Total	12	16

Procedure

Due to the sequence of the rotations to the various settings, the test could not be administered in the same time relationship in each area without possible contamination of the responses to the tool. Thus one time was selected in which to administer the tool to the entire sample. The time chosen was after approximately 100 hours had been spent in each setting.

The test instructions were reviewed as they are written (p. 14), and the respondent was requested to complete Part I before looking at Part II. The respondents were allowed to take the test home to complete but were asked not to discuss it with anyone until all of the results were collected. Two weeks were required for these data collection.

The author took the test first since she was functioning in the role of the physician's associate and did not want her responses biased by the knowledge of how the others had answered.

After the data were collected, the test results were checked to determine if the instructions had been followed. A list was made of all the general functions listed under "Functional Similarities" and "Functional Dissimilarities." These were then coded so that a computer program could be constructed. Two nurses in the graduate program also independently coded the data to test the reliability of the code. The three codings were then compared and agreement was reached on a common number assignment for each function. For those points that still remained arbitrary, two votes over-rode the third. The necessity for a two-thirds majority vote came up only three times out of 560 chances. The Code List of Functions can be found in Appendix C.

The data were then analyzed according to a Data Entry Program and especially designed Physician's Associate Role Analysis

Program utilizing a Digital Equipment Company PDP-8-I Computer. Rank order percentage scores were calculated for: 1) roles linked; 2) perceived functions related to Part I of the tool; 3) percentages of agreement for the assignment of the physician's associate to the selected functions; and 4) roles linked with the listed functions related to Part II of the tool. The data were computed for each of the following groups in the study population: nurses, physicians, graduates prior to 1965, graduates after 1965, persons working in the clinic, persons working in the county hospital, persons working at the veterans' hospital, and total study population. Tables were made from the results.

CHAPTER III

RESULTS OF FIELD STUDY

Results are presented in four major sections: 1) identification of the roles most frequently linked with the physician's associate; 2) identification of independently assigned functions perceived as most appropriate for the physician's associate; 3) identification of functions from a selected list that are perceived as most appropriate for the physician's associate; and 4) identification of roles perceived as most appropriate for the selected functions. Each of the previous four factors was analyzed further to consider: responses of the entire study population; responses of the nurses as compared with those of the doctors; and responses of the "before 1965 graduates" as compared with those of the "after 1965 graduates."

Roles Linked with the Physician's Associate

The roles most often linked with the physician's associate were determined by analysis of the paired choices on Part I of the Physician's Associate Role Perception Test illustrated on page 15. The percent of frequency of association with the physician's associate role with each of the other ten roles was calculated. The number of times the linkage was made was divided by the number of times the linkage could have been made and the result multiplied by 100. The

actual number of times the linkage was made was divided by the number of times the linkage could have been made varied for each role. Example: each respondent had seven opportunities to link the resident with the physician's associate. The 28 respondents therefore had the potential of connecting the roles 196 times. The study population made the connection 102 times or 52 percent of the time. These percentage scores were then used to place the roles in rank order. The responses of the entire study population are summarized in Table 4. The responses of the nurses compared with those of the doctors are shown in Table 5. Table 6 compares the responses of the "before 1965 graduates" with those of the "after 1965 graduates."

Table 4. Rank Order of Roles Linked with Physician's Associate by Entire Study Population

Role	% of Association
Public health nurse	62.0
CCU nurse	57.0
Resident	52.0
Social worker	48.0
Medical student	47.0
Intern	35.0
Staff nurse	28.0
Clinic nurse	25.0
Head nurse	18.0
Nursing supervisor	10.0

$$\text{Computed percent} = \frac{\text{number of times role was selected}}{\text{number of times possible}} \times 100$$

N = 28

Table 5. Rank Order of Roles Linked with Physician's Associate by Nurses and Doctors

Nurses		Doctors	
Role	% of Association	Role	% of Association
Public health nurse	58.0	Public health nurse	67.0
Social worker	53.0	CCU nurse	63.0
Resident	52.0	Medical student	60.0
CCU nurse	51.0	Resident	57.0
Medical student	45.0	Intern	50.0
Clinic nurse	32.0	Social worker	33.0
Intern	31.0	Staff nurse	25.0
Staff nurse	28.0	Clinic nurse	10.0
Head nurse	20.0	Head nurse	7.0
Nursing supervisor	9.0	Nursing supervisor	3.0

Computed percent = $\frac{\text{number of times role was selected}}{\text{number of times possible}} \times 100$

N = 15

N = 10

Table 6. Rank Order of Roles Linked with Physician's Associate by "Before 1965 Graduates" and "After 1965 Graduates"

Before 1965 Graduates		After 1965 Graduates	
Role	% of Association	Role	% of Association
Public health nurse	58.0	Public health nurse	65.0
Social worker	58.0	CCU nurse	62.0
Resident	52.0	Medical student	59.0
CCU nurse	50.0	Resident	52.0
Staff nurse	33.0	Intern	44.0
Medical student	31.0	Social worker	40.0
Clinic nurse	27.0	Staff nurse	23.0
Intern	22.0	Clinic nurse	23.0
Head nurse	22.0	Head nurse	15.0
Nursing supervisor	14.0	Nursing supervisor	6.0

Computed percent = $\frac{\text{number of times role was selected}}{\text{number of times possible}} \times 100$

N = 12

N = 16

Functions Independently Assigned
to the Physician's Associate

Examination of the "functional similarities" and "functional dissimilarities" written by the respondents on Part I of the tool revealed the functions thought of independently by the respondents. Tables were made to show the rank order of functions linked with the physician's associate according to frequency of occurrence. The percentages were computed by dividing the total number of possible times a function could have been linked with the physician's associate into the actual number of times a given function was linked with the physician's associate. An example of how this calculated is as follows: coded function number 36 was mentioned 83 times. There were 560 (28 respondents times 20 linked functions) chances for a function to have been linked. $83/560 \times 100 = 14.8$ percent. The functions with the higher percentages of occurrence were the functions most commonly perceived as belonging to the physician's associate. The functions mentioned less frequently are also of note because they give indications of the possible range of activities the physician's associate is perceived as pursuing. The functions with greater than 2.9% of occurrence were the most closely examined. Table 7 summarizes the responses by the entire study population. Table 8 compares the responses of the nurses with those of the doctors.

Table 7. Rank Order of Functions Independently Linked with the Physician's Associate by Total Study Population

Code	Functions	% of Occurrence
36	Gives continuing long term care	14.8
17	Makes therapeutic decisions with regard to diagnosis and treatment	11.0
16	Performs history and physical	7.1
24	Gives "personal" direct patient care	7.1
22	Is concerned with psychological and social aspects of patient care	5.0
41	Performs nursing functions	4.3
27	Teaches patients	4.0
2	Writes orders	3.6
5	Has primary patient responsibility	3.1
9	Is specialized	3.1
23	Gives total patient care	3.1
20	Is concerned with medical problems	2.9
25	Makes independent judgements and evaluates problems	2.9

N = 28

(Functions listed less than 2.9% of the time can be found in the Code List of Appendix C on page 60.)

Table 8. Rank Order of Functions Independently Linked with the Physician's Associate by Nurses and Doctors

Nurses			Doctors		
Code	Functions	% of Occurrence	Code	Functions	% of Occurrence
36	Gives continuing long-term care	18.2	17	Makes therapeutic decisions with regard to diagnosis and treatment	20.0
17	Makes therapeutic decisions with regard to diagnosis and treatment	8.0	36	Gives continuing long-term care	12.9
16	Performs history and physicals	7.6	24	Gives "personal" direct care	12.1
*27	Teaches patients	7.1	16	Performs history and physical	7.9
22	Is concerned with psychological and social aspects of care	6.2	* 2	Writes orders	7.1
*41	Performs nursing functions	5.3	* 9	Is specialized	6.4
*25	Makes independent judgements	4.0	*20	Is concerned with medical problems	5.7
*11	Works under a physician	3.6	22	Is concerned with psychological and social aspects of care	4.3
* 5	Has primary patient responsibility	3.1	23	Gives total patient care	4.3
23	Gives total patient care	3.1			
24	Gives "personal" direct care	3.1			
*29	Performs diagnostic and treatment procedures	3.1			

N = 15

N = 10

*Functions peculiar to each group

Table 9 compares the responses of the "before 1965 graduates" with those of the "after 1965 graduates."

Table 9. Rank Order of Functions Independently Linked with the Physician's Associate by "Before 1965 Graduates" and "After 1965 Graduates"

Before 1965 Graduates			After 1965 Graduates		
Code	Functions	% of Occurrence	Code	Functions	% of Occurrence
36	Gives continuing long-term care	21.4	17	Makes therapeutic decisions with regard to diagnosis and treatment	14.2
16	Performs history and physical	13.1	36	Gives continuing long-term care	10.8
*41	Performs nursing functions	7.7	24	Gives "personal" direct care	10.0
17	Makes therapeutic decisions with regard to diagnosis and treatment	7.1	* 2	Writes orders	5.0
22	Is concerned with psychological and social aspects of care	6.5	* 9	Is specialized	5.0
* 6	Has secondary patient responsibility	4.2	*23	Gives total patient care	4.6
27	Teaches patients	4.2	22	Is concerned with psychological and social aspects of care	4.2
* 5	Has primary patient responsibility	3.6	27	Teaches patients	4.2
24	Gives "personal" direct care	3.6	*25	Makes independent judgements	3.7
*11	Works under a physician	3.0	16	Performs history and physical	3.3
*32	Is acute-care oriented	3.0	*20	Is concerned with medical problems	3.3

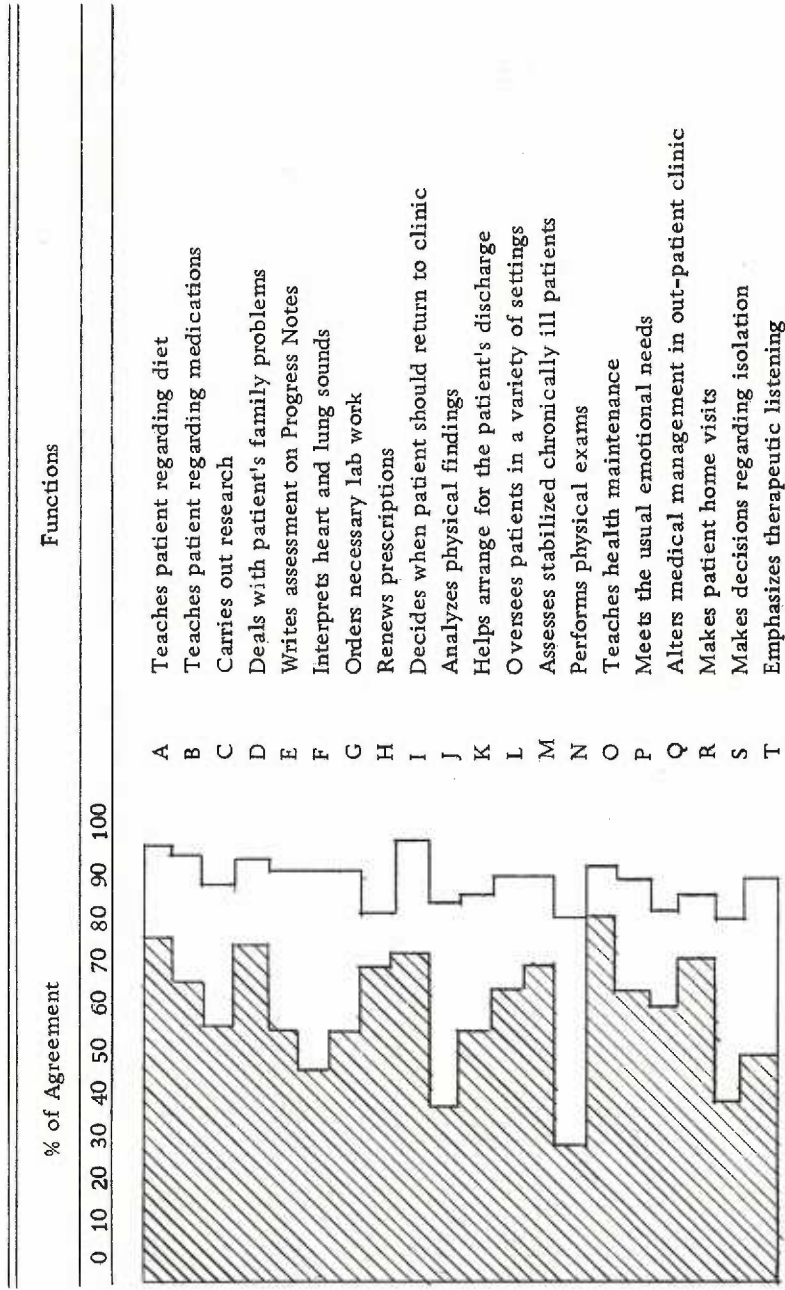
N = 12

N = 16

* Functions peculiar to each group

Functions Assigned to the Physician's
Associate from a Given List

The functions listed on Part II of the tool reflect the perceptions by the physician's associate of her own function. Therefore the results indicate the percent of agreement between the respondents and the physician's associate for the assignment of the listed functions to the physician's associate role. The respondents had been asked to place three circles in the squares indicating the roles most appropriate for performing each listed function. These functions were considered to be perceived as major functions. The respondents were then requested to place check-marks in the columns to indicate additional roles that could assume the listed functions. These functions were considered perceived as minor functions. The percentages were calculated by dividing the number of times the physician's associate could have been chosen for each function into the number of times the physician's associate was chosen and multiplied by 100. An example of this instance is as follows: code function A was selected as a major function of the physician's associate 21 times out of 28 possible times. $21/28 \times 100 = 75$ percent. This same function was selected as a minor function for the physician's associate five additional times. $5 + 21 = 26$. $26/28 \times 100 = 93$ percent. Figure 1 summarizes the responses of the entire study population. Figure 2 summarizes the responses of the nurses and doctors.



mean = 61.45%
 mean = 86.9%
 N = 28

Figure 1. Percentages of Agreement for the Assignment of the Physician's Associate to Selected Functions by Total Study Population

▨ perceived major functions
 ▤ perceived minor functions

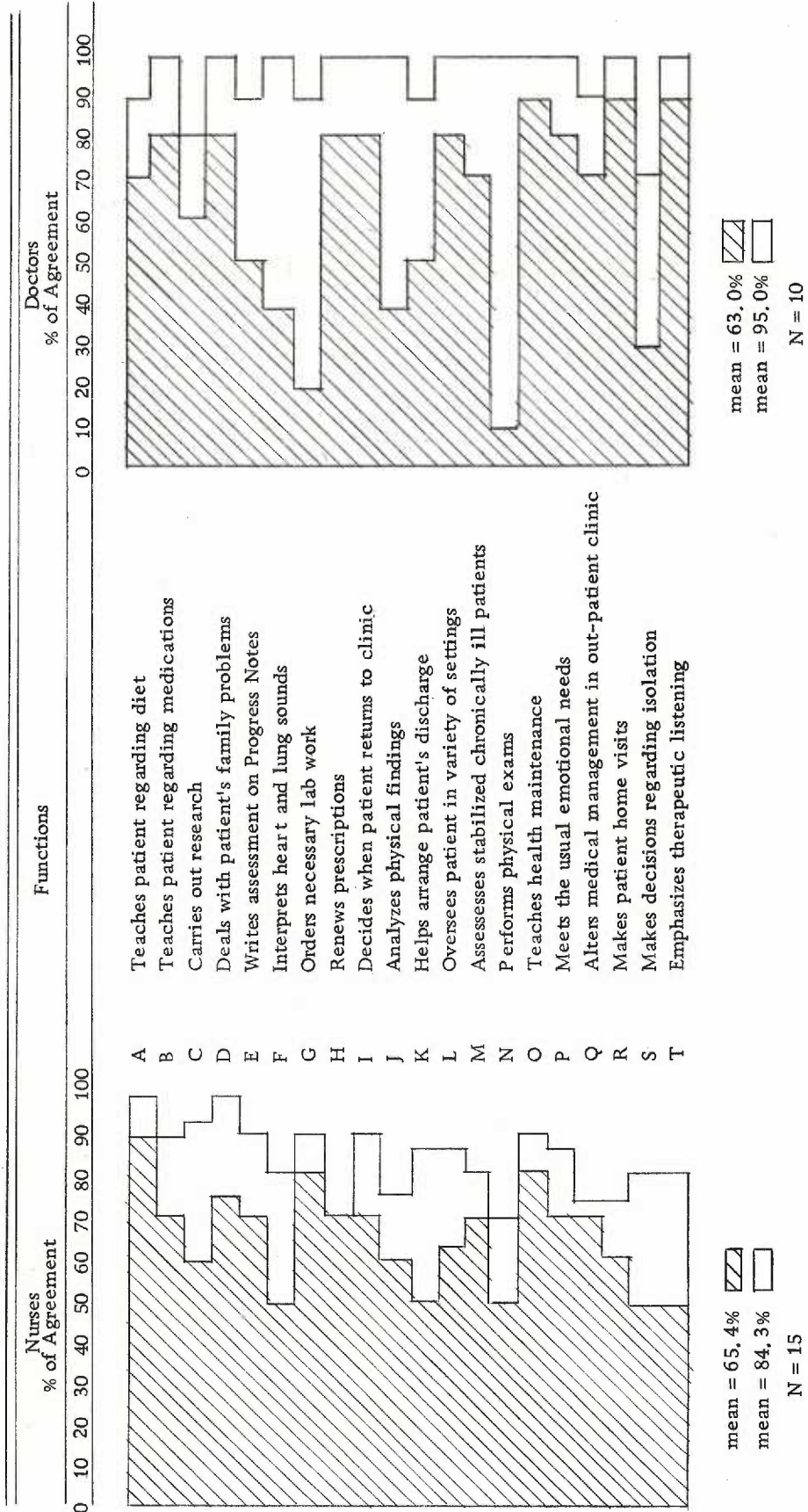


Figure 2. Percentages of Agreement for the Assignment of the Physician's Associate to Selected Functions by Nurses and Doctors

Figure 3 compares the responses of the "before 1965 graduates" and the "after 1965 graduates."

Roles Perceived as Most Appropriate
for the Given Functions

Part II of the tool requested the respondents to place three circles in the columns indicating the roles most appropriate for performing each listed function and check-marks in columns indicating any other role that might also perform the function. Figures 1, 2, and 3 are rank order lists of the responses involving the physician's associate. Tables 10, 11, and 12 are rank order lists of the eleven roles in order of their linkage with the given functions. The percentages for ranking were obtained by tallying the number of times a role was assigned in either a major or a minor way to all of the functions and dividing this number by the possible number of times each role could have been selected. An example of these calculations is: the resident was selected for performing the functions 464 times out of a possible 560 (20 functions times 28 respondents). $464/560 \times 100 = 83$ percent. The results indicate the perceived order of roles appropriate for the given list of functions. Table 10 summarizes the responses of the entire study population. Table 11 compares the responses of the nurses with those of the doctors. Table 12 compares the responses of the "before 1965 graduates" with those of the "after 1965 graduates."

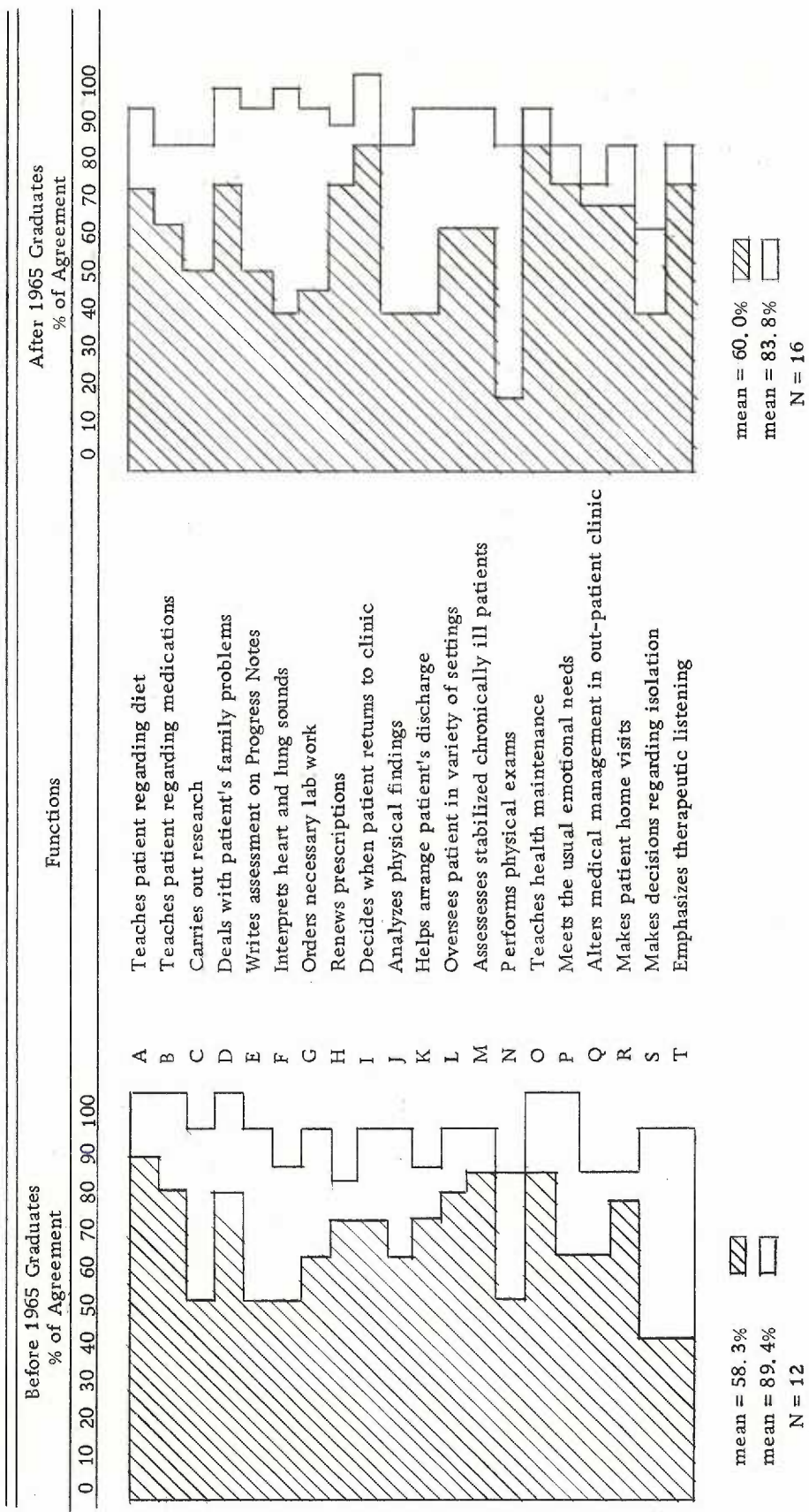


Figure 3. Percentages of Agreement for the Assignment of the Physician's Associate to Selected functions by "Before 1965 Graduates" and "After 1965 Graduates" Key: perceived major functions perceived minor functions

Table 10. Rank Order of Frequency of Roles Linked with Listed Functions by Total Study Populations

Role	Percent of Linkages
Physician's associate	87.0
Resident	83.0
Intern	77.1
Medical student	65.4
Public health nurse	47.3
Staff nurse	33.6
Clinic nurse	31.2
Head nurse	31.1
Social worker	30.7
CCU nurse	28.0
Nursing supervisor	11.8

Table 11. Rank Order of Frequency of Roles Linked with Listed Functions by Nurses and Doctors

Nurses		Doctors	
Role	Percent	Role	Percent
Physician's associate	84.3	Physician's associate	95.0
Resident	81.7	Intern	89.5
Intern	70.7	Resident	88.0
Medical student	54.7	Medical student	83.5
Public health nurse	46.0	Public health nurse	48.5
Staff nurse	41.3	Social worker	31.0
Head nurse	39.7	Staff nurse	25.0
Clinic nurse	35.7	Clinic nurse	24.0
CCU nurse	32.0	CCU nurse	22.0
Social worker	27.0	Head nurse	18.5
Nursing supervisor	12.7	Nursing supervisor	10.0

Table 12. Rank Order of Frequency of Roles Linked with Listed Functions by "Before 1965 Graduates" and "After 1965 Graduates"

Before 1965 Graduates		After 1965 Graduates	
Role	Percent	Role	Percent
Physician's associate	90.8	Physician's associate	84.1
Resident	87.5	Resident	81.2
Intern	77.5	Intern	76.9
Medical student	67.5	Medical student	63.7
Public health nurse	52.9	Public health nurse	43.1
Clinic nurse	41.2	Social worker	29.1
Staff nurse	40.4	Staff nurse	28.4
Head nurse	39.2	CCU nurse	25.9
Social worker	32.9	Head nurse	25.0
CCU nurse	30.8	Clinic nurse	23.7
Nursing supervisor	15.0	Nursing supervisor	9.4

The author decided to go one step further in the examination of the listed functions. High frequency of application of functions to a given role could have been due to the listing of functions that were generally applied to any role. To rule out this possibility the functions listed on Part II of the tool were examined for overlapping role acceptability. The percentage of roles that was considered applicable to each function was tallied and placed in rank order. This identified the functions of shared responsibility and gave the degree of permeability for each function. An example of these calculations is: there were 308 (11 roles times 28 respondents) possible times a role could have been assigned to each function. Function code P was assigned 208 times. $208/308 = 67.5$ percent.

By comparing Tables 13, 14, and 15 with Table 16 one can observe that the functions with the highest percentages of acceptability for the physician's associate were well distributed throughout the permeability spectrum. This indicates that the over-all acceptance of the functions for the physician's associate was not based on generalized functions alone, but also involved highly selective functions.

Table 13. Rank Order of Functions According to Overlapping Role Acceptability by Total Study Population

Tool Code	Listed Functions	% of Overlap
P	Meets the usual emotional needs of patients	67.5
T	Emphasizes therapeutic listening in patient care	66.6
B	Teaches patients regarding meds	64.0
D	Deals with patient's family problems	64.0
O	Teaches health maintenance	60.1
A	Teaches patients regarding diet	56.8
C	Carries out research	52.9
S	Makes decisions regarding isolations	52.3
K	Helps arrange for patient discharge	48.4
F	Interprets heart and lung sounds	47.1
E	Writes assessments on progress notes	43.2
J	Analyzes physical findings	43.2
L	Oversees patients in a variety of settings	41.9
I	Decides when patients should return for check-ups	40.6
N	Performs physical exams	39.6
G	Orders necessary laboratory work	37.3
M	Assesses stabilized chronically ill patients in clinic	37.3
Q	Alters medical management in the out-patient clinic	32.5
H	Renews prescriptions	32.1
R	Makes patient home visits	31.2

CHAPTER IV

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The emergence of a new role into effective use involves a variety of problems. One of these problems is recognition. Analysis of the roles linked with the physician's associate in this study shows that the sample population perceived the physician's associate role to be most like that of the public health nurse, the CCU nurse, and the medical resident. This implies that the physician's associate is perceived as functioning in both the general area of medicine and specialized areas of nursing. This finding is similar to the concept of Bates (3) who portrays medicine and nursing as two overlapping circles with a common area of responsibility that could be shared. This common area seems to be recognized as the general base for the physician's associate.

The fact that the physician's associate role is perceived to cover the common area could have far-reaching implications for the redefining of today's health team. If the area between nursing and medicine is bridged by a role acceptable to each, then better utilization of each profession could be practiced. For example: the clinic nurse is responsible for taking weights and blood pressures and placing patients in examination rooms. If a nurse in an expanded role could complete a history and physical examination and handle

routine kinds of care and outline a nursing assessment and plan of care, the clinic nurse could then act on the assessment plan and the doctor could concentrate his efforts on the more complex problems that he was trained to handle.

Another result of the analysis of the linked roles is the association of the physician's associate with the public health nurse.

As mentioned by Walker (33) the public health nurse has been functioning in the capacity of the physician's associate for years without other professionals being aware of it. Besides indicating the lack of recognition of the public health nurse role, Walker's point seems to indicate that the public health nurse would probably require less additional training to perform in this role than any other health worker.

Along with recognition, an emerging role must have a job description that is acceptable in the professional realms in which the role is to function. Analysis of the functions assigned to the physician's associate reveals the pattern of behavior expected. The most frequently appearing functions independently assigned to the physician's associate by the entire study population were:

1. Giving continuing long-term care,
2. Making therapeutic decisions with regard to diagnosis and treatment,
3. Performing histories and physical exams,
4. Giving "personal" direct patient care,

5. Being concerned with psychological and social aspects of care,
6. Performing nursing functions,
7. Teaching patients,
8. Writing orders,
9. Holding primary patient responsibility, and
10. Specializing.

These functions represent the acceptable dimensions of the physician's associate role. This list, coupled with the functions given on Part II of the tool (which had an over-all acceptance and agreement rate of 87%), would therefore form the basis of a job description for the physician's associate at the University of Oregon Medical Center.

The obtaining of the above information was the major purpose of this study. However analysis of the responses of specific segments of the study population illustrated other aspects of the emerging role.

The perceptions of the role held by the nurses differed from the perceptions held by the physicians. The nurses linked the physician's associate with the public health nurse, the social worker, and the coronary care unit nurse. The physicians linked the physician's associate with the public health nurse, the CCU nurse, and the medical student. The discrepancy seems to be between the association of the physician's associate with the social worker and the medical student. The physicians appear to believe that the expanded role

overlaps more into their own domain. The functions ascribed the physician's associate reflected a similar outlook. The nurses described nursing functions and emphasized the psychological and social aspects of patient care. The physicians ascribed more of their traditional functions such as "writing orders" and "basic concern with managing medical problems." The nurses assigned a six and one-half percent higher acceptance of the listed functions as major aspects of the expanded role, while the physicians expressed a seven and one-half percent higher acceptance of the functions as minor aspects of the expanded role.

One may question whether these findings represent actual differences in perceptions of the physician's associate role, or rather a reflection of the philosophical emphasis of each profession. Nursing education, especially during the past decade, seems to have been geared toward the psychological and social aspects of patient care. Medicine on the other hand seems to have been more concerned with the influence of pathology on the human anatomy and physiology. Further investigation of the differences of opinion between nurses and physicians is definitely indicated.

Professionals who had completed their training prior to 1965 saw the nurse in a less restricted manner than did the professionals who were in training after 1965. The "before 1965 graduates" had an eight and one-half percent higher mean acceptance of the

physician's associate performing the listed functions in a major and/or minor way, and a 6.7% higher association of the listed functions with the physician's associate role. This is opposite to the findings of the Reed and Roghman study (29). It may be that the older segment of the study population was more secure in role identification than was the younger and therefore less threatened by the prospects of role changes. Again, further investigation of these two groups is needed.

Recommendations

1. A job description for the physician's associate role at the University of Oregon Medical Center needs to be written and demonstrated.
2. Further investigation of the differences in role perception held by nurses and physicians are indicated.
3. More information about the discrepancy between the association of the physician's associate with the social worker and the medical student would be of help.
4. Studies of the influence of security in role identification on role perceptions need to be made.

Limitations

This study was conducted on a small sample. When a new, essentially undefined role is first attempted in a setting which involves a variety of professions, observations and study must be confined to those who have had contact with the new role. Now that this new role has been functioning for a period of time and ideas have jelled, the study could be profitably expanded to include more of a cross-section of people.

Another limitation of this study was the administering of the tool by the person who performed in the role to be studied. Further validation of this data may be desired to rule out possible examiner bias.

Conclusions

1. The study population at the University of Oregon Medical Center indicated over-all high acceptance of the physician's associate role.
2. The physician's associate is perceived as functioning in both the general area of medicine and specialized areas of nursing.
3. The perceptions of the physician's associate role held by nurses differ from those held by doctors.
4. Professionals in this sample who had completed their training prior to 1965 see the nurse in a less restricted manner than do the professionals who were in training after 1965.

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APPENDICES

APPENDIX A: Tool used in Pilot Study

APPENDIX B: Pilot Study Results

APPENDIX C: Code List of Functions Derived
from Study Population Responses
to Part I of the Physician's
Associate Role Perception Test

APPENDIX A
TOOL USED IN PILOT STUDY

Pilot Study

INSTRUCTIONS

ROLE CONSTRUCT REPERTORY TEST

This test consists of four parts: 1) OVERLAY, 2) GRID I, 3) GRID II, and 4) these INSTRUCTIONS. The test is designed to help the examiner to understand your role and roles of others with whom you work.

1. Start with the OVERLAY SHEET. Write the first name of each of the persons described. If you cannot remember a person's first name, write his last name or something about him which will bring him clearly to your mind when you go back over the sheet.

USE YOUR OWN NAME FOR THE ROLE THAT APPLIES TO YOU.

If someone isn't functioning in this role in your setting now, name someone you know who has functioned in this role.

Circle M if the person is male, and F if the person is female.

2. Next place the OVERLAY SHEET over the GRID I SHEET exposing only the top row of squares. Note that the row of squares has three circles in it. This means that you are first to consider the three persons whose names appear on your OVERLAY SHEET. Are two of them alike in some important way that distinguishes them from the third person in regard to their role? Keep thinking about them until you remember the important way in which two of them are alike and which sets them off from the third person.

When you have decided which two it is, and the important way in which they are alike, put an "X" in the two circles corresponding to the two who are alike. Do not put any mark in the third circle.

Now write in the blank under "Construct" the word or short phrase that tells how these two are alike.

Next write in the blank under "Contrast" what you consider to be opposite of this characteristic.

3. Now consider each of the other thirteen persons whose names appear on your OVERLAY SHEET. In addition to the two persons whom you have marked with "X", which ones also have

this important characteristic? Put a check-mark (✓)--not an "X"--in the box of that row which corresponds.

Move your OVERLAY SHEET down so that the next row of squares is exposed and repeat the same steps.

AFTER YOU HAVE COMPLETED GRID I, PROCEED TO GRID II.

In the row of squares along-side each role construct, put a circle in the three most appropriate squares. Place check-marks (✓) in the squares corresponding to others who might also perform the role.

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION!

OVERLAY SHEET

- M F _____ 1. Intern
- M F _____ 2. Resident
- M F _____ 3. Attending physician
- M F _____ 4. Head nurse
- M F _____ 5. Hospital staff nurse
- M F _____ 6. Clinic nurse
- M F _____ 7. ICU or CCU nurse
- M F _____ 8. Physician-associate nurse
- M F _____ 9. Pharmacist
- M F _____ 10. Social worker
- M F _____ 11. Dietitian
- M F _____ 12. Medical student
- M F _____ 13. Nurse graduate student
- M F _____ 14. Public health nurse

Name: _____
 Role: _____
 Date: _____
 Basic Training Prior to 1965 _____

GRID II

CONSTRUCTS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A														
B														
C														
D														
E														
F														
G														
H														
I														
J														
K														
L														
M														
N														
O														
P														
Q														
R														
S														
T														

- A Teaches patient regarding diet
- B Teaches patient regarding medications
- C Carries out research
- D Deals with patient's family problems
- E Writes assessment on Progress Notes
- F Evaluates heart and lung sounds
- G Administers I. V. medications
- H Admits patients to hospital
- I Draws blood
- J Diagnoses
- K Helps arrange for patient's discharge
- L Is responsible for total care of patient
- M Handles stabilized chronically ill patients in clinics
- N Performs initial screening exams
- O Teaches prevention
- P Meets the usual emotional needs of patients
- Q Alters medical treatment in the out-patient clinic
- R Makes patient home visits
- S Initiates cardiac massage when necessary
- T Makes decisions regarding isolation of an infected patient

APPENDIX B
PILOT STUDY RESULTS

Pilot Study Results

The tool used by the eight graduate students produced information that is summarized in Tables A, B, and C.

Table A is a rank order summary of the percentages of times that the physician's associate role was linked with each of the other roles. This was based on Part I of the tool which asked each respondent to choose two roles out of three that were more alike. The percentages were obtained by dividing the number of times that the linkage could have been chosen into the actual number of times that the linkage was made. Because the denominator was different for each role, each resultant number was then multiplied by 100 to give percentiles that could be compared. The results of table A indicate that the eight graduate students perceived the physician's associate role to be most like that of the public health nurse, the social worker and the intern.

Table B is the rank order of functions independently linked with the physician's associate according to frequency of occurrence. The table is a summary of the functions written by the respondents under "Constructs" on Part I of the tool. The percentages of occurrence are of note because they represent the number of times a certain function was thought of independently by the respondents. The figure was computed by dividing the total number of possible times a function could have been linked into the number of times a given function

was mentioned. The results indicate that the functions seen as most appropriate for the physician's associate were: the meeting of psychological and social needs, the performing of comprehensive long-term care, and the making of independent judgements. The entire list gives the examiner an idea of the dimensions of the physician's associate role as perceived by the graduate students.

Table C is the percentage of agreement for the assignment of the physician's associate to the selected functions given on Part II of the tool. The eight graduate students were asked to place three circles in the squares indicating the roles most appropriate for performing each listed function. Table C indicates the percentages of times the physician's associate was chosen for each function. The eight students had the highest agreement on the following functions: taking responsibility for total care of patients; handling stabilized chronically ill patients in the clinics; and making patient home visits.

The result of the pilot study included the information sought by the author. The tool was considered valid for its purpose and was revised for the study.

Table A. Rank Order of Roles Linked with Physician's Associate by 8 Graduate Students

Role	% of Association
1. Public health nurse	15/16 = 93.7
2. Social worker	16/32 = 50.0
3. Intern	17/40 = 42.5
4. CCU nurse	6/16 = 37.5
5. Medical student	18/48 = 37.5
6. Resident	22/64 = 34.3
7. Staff nurse	10/32 = 31.0
8. Head nurse	12/48 = 25.0
9. Clinic nurse	10/48 = 20.0
10. Dietitian	3/16 = 18.5
11. Pharmacist	2/16 = 12.5
12. Attending physician	2/16 = 12.5

Computed percent = $\frac{\text{number of times role was selected}}{\text{number of times possible}} \times 100$

Table B. Rank Order of Functions Linked with Physician's Associate According to Frequency of Occurrence by 8 Graduate Students

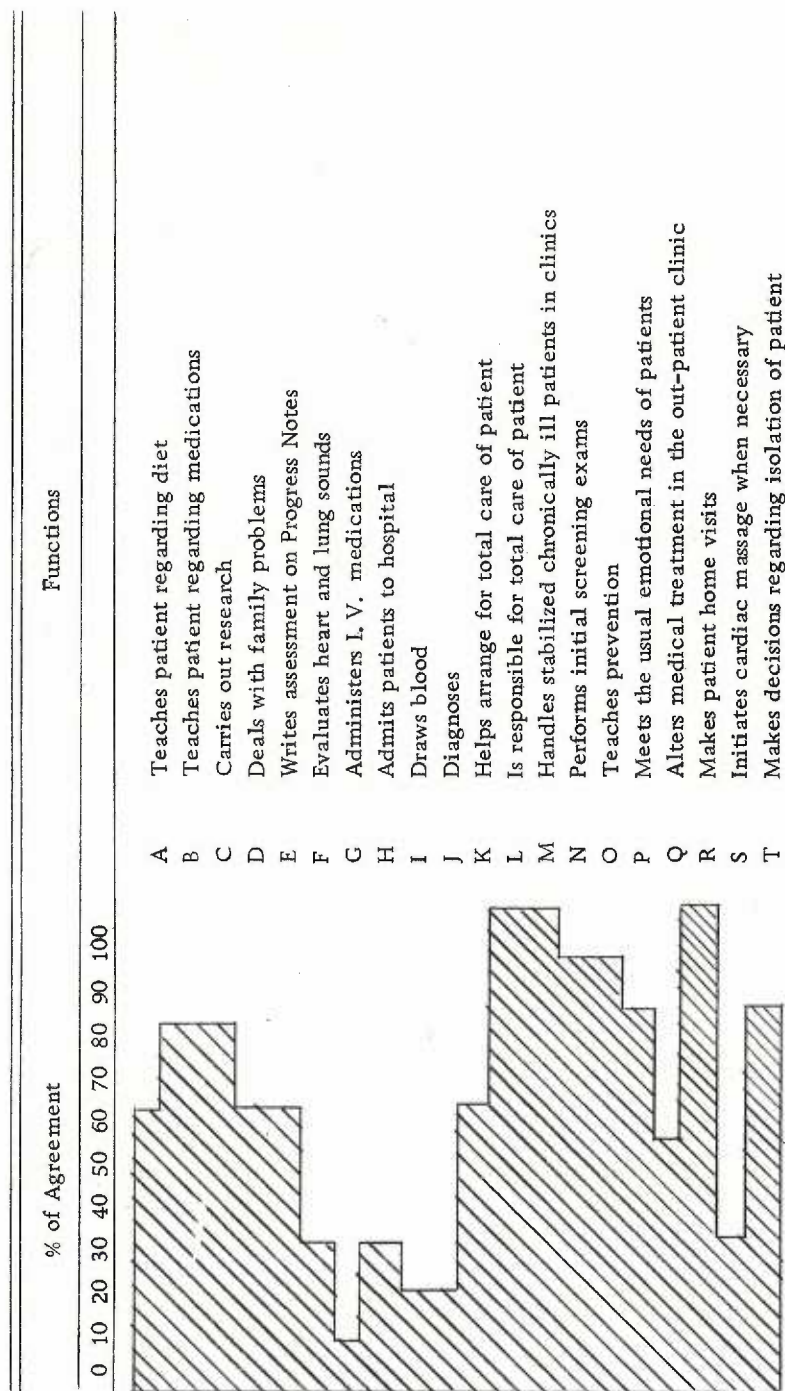
Functions	% of Occurrence
1. Meets psychological and social needs	19/192 = 9.9
2. Performs comprehensive long-term care	15/192 = 7.8
3. Makes independent judgements	15/192 = 7.8
4. Gives direct "total" patient care	10/192 = 5.2
5. Makes home visits	9/192 = 4.7
6. Diagnoses physical findings	8/192 = 4.1
7. Writes orders	8/192 = 4.1
8. Has "caring" role	8/192 = 4.1
9. Is an R. N.	7/192 = 3.6
10. Has primary patient responsibility	7/192 = 3.6
11. Teaches patients	6/192 = 3.1
12. Carries out doctor's orders	6/192 = 3.1
13. Performs history and physical	5/192 = 2.6
14. Makes rounds on hospitalized patients	5/192 = 2.6
15. Performs nursing functions	5/192 = 2.6
16. Is specialized	5/192 = 2.6
17. Deals mainly with chronically ill patients	5/192 = 2.6
18. Sees patients in a variety of settings	4/192 = 2.1
19. Gives physical care	4/192 = 2.1
20. Assesses patient status	4/192 = 2.1
21. Carries patient load	4/192 = 2.1

Table B (Continued)

Functions	% of Occurrence
22. Works under a physician	3/192 = 1.6
23. Works with a physician	2/192 = 1.1
24. Is a stable member of staff	2/192 = 1.1
25. Screens patients	2/192 = 1.1
26. Has little concern with administration	2/192 = 1.1

Computed percent = $\frac{\text{number of times mentioned}}{\text{*total possible number}} \times 100$

*The total number possible in each case was 192. This figure was derived from the multiplication of the number of sorts (24) applicable to the physician's associate by the number (8) of persons taking the test. The function could have been listed under "Functional Similarity" or "Functional Dissimilarity", whichever was being used to describe the physician's associate.



N = 8

Figure A. Percentage of Agreement for the Assignment of the Physician's Associate to Selected Functions by 8 Graduate Students

APPENDIX C

CODE LIST OF FUNCTIONS DERIVED FROM STUDY
POPULATION RESPONSES TO PART I OF THE
PHYSICIAN'S ASSOCIATE ROLE PERCEPTION TEST

CODE LIST OF FUNCTIONS

1. Carries out treatments and orders
2. Writes orders
3. Cannot write orders
4. Prescribes medications
5. Has primary patient responsibility
6. Has secondary patient responsibility
7. Is a physician
8. Is not a physician
9. Is specialized
10. Works closely with a physician
11. Works under a physician
12. Works under nursing supervisor
13. Directs peers
14. Is in charge of team
15. Is an integral part of team
16. Performs history and physical
17. Makes therapeutic decisions with regard to diagnosis
and treatment
18. Diagnoses complicated problems
19. Diagnoses uncomplicated problems
20. Is concerned with medical problems

22. Is concerned with psychological and social aspects
23. Gives "personal" direct patient care
24. Makes independent judgements and evaluates problems
25. Teaches staff
26. Teaches patients
27. Teaches patient's family
28. Performs diagnostic procedures
29. Prepares for diagnostic procedures
30. Is acute-care oriented and utilizes emergency techniques
31. Works with patients in a variety of disease stages
32. Gives episodic care
33. Gives continuing long-term care
34. Works in one setting only
35. Works in hospital setting
36. Initiates referrals
37. Performs nursing functions
38. Gives physical care
39. Makes beds
40. Arranges for needed isolation
41. Prepares patient for hospital discharge
42. Screens patients
43. Keeps patient records

44. Writes on progress notes
45. Makes hospital rounds
46. Carries out research
47. Has primary function of learning
48. Functions to keep lines of communication open between
physicians and nurses
49. Performs managerial and supervisory duties
50. Is employed
51. Is licensed
52. Has little close patient contact
53. Has professional status in medicine

AN ABSTRACT OF THE FIELD STUDY OF

SUSAN STROM DAGGETT

For the: MASTER OF NURSING

Date of receiving this degree: June 8, 1973

Title: DIMENSIONS OF THE "EXPANDED ROLE OF THE NURSE"
AS PERCEIVED AT THE UNIVERSITY OF OREGON
MEDICAL CENTER

Approved:

Evelyn Schindler, M. A.

Field Study Advisor

A suggested approach to the improvement of health care delivery in the United States is better utilization of the nurse in an expanded role. Since the late 1950's medical groups in various parts of the country have been setting up out-patient clinics in which nurses are taking on responsibilities usually reserved for physicians. This author had the unique opportunity to develop such a role at the University of Oregon Medical Center by working with a medical resident during his rotations through a county hospital, an out-patient clinic, a veterans' hospital, and a coronary care unit. This descriptive study was designed to develop an appropriate tool for measuring the dimensions of the expanded role of the nurse, and to study the perceptions of this role that were held by the professionals with whom the author worked.

Based on Kelly's psychology of dichotomous constructs and Role Construct Repertory Test, a Physician's Associate Role

Perception Test was devised. In this tool ten different professional roles are compared with the physician's associate role in regard to functional similarities and functional dissimilarities. Part I of the tool gives 20 different combinations of three out of 11 roles and asks the respondent to decide how two are alike and different from the third. The functional similarities and dissimilarities of the choices are then requested. Part II of the tool lists 20 functions and asks the respondent to choose three out of the 11 roles most appropriate for performing the functions. Identification of other roles that might also perform the functions was then requested.

The tool was administered to a sample of 28 persons who had contact with the author while she functioned as a physician's associate from October 1971 through March 1972. The sample included at least one person in each of the 11 different roles. Other criteria used in selecting the sample were: location of contact with the physician's associate; role training (R. N. or M. D.); and year of graduation from basic training. The data were analyzed according to a Data Entry Program and specially designed Physician's Associate Role Analysis Program utilizing a Digital Equipment Company PDP-8-I Computer. Rank order percentage scores were calculated for:

- 1) roles linked with the physician's associate;
- 2) functions linked with the physician's associate;
- 3) agreement for the assignment of the physician's associate to selected functions;
- and 4) roles linked

with the selected functions.

The results show that the physician's associate role has a greater than 50 percent association with each of the following roles: public health nurse 62 percent; CCU nurse 57 percent; and the medical resident 52 percent. The most frequently appearing functions independently assigned to the physician's associate by the entire study population were:

1. Giving continuing long-term care,
2. Making therapeutic decisions with regard to diagnosis and treatment,
3. Performing physical exams and taking histories,
4. Giving "personal" direct patient care,
5. Being concerned with psychological and social aspects of care,
6. Performing nursing functions,
7. Teaching patients,
8. Writing orders,
9. Holding primary patient responsibility, and
10. Specializing.

The functions listed on Part II of the tool with greater than 70 percent acceptability for the physician's associate were:

- O - Teaching health maintenance,
- A - Teaching patients regarding diets,
- D - Dealing with patient's family problems,

- M - Assessing stabilized chronically ill patients,
- R - Making patient home visits, and
- I - Deciding when patients should return to clinic.

The over-all acceptance and agreement with the listed functions for the physician's associate was 87 percent. The other professionals most likely to perform these same functions were the resident, the intern, and the medical student.

The perceptions of the role held by nurses differed from the perceptions held by physicians. The nurses linked the physician's associate with the public health nurse, the social worker, and the CCU nurse. The physicians linked the physician's associate with the public health nurse, the CCU nurse, and the medical student. The discrepancy seems to be between the association of the physician's associate with the social worker and the medical student. The physicians appear to believe that the expanded role overlaps more into their own domain. The functions ascribed the physician's associate reflected a similar outlook. The nurses described nursing functions and stated that the physician's associate worked "under" the supervision of a doctor. The physicians ascribed more of their traditional functions such as "writing orders" and "basic concern with managing medical problems." The nurses assigned a 6.5 percent higher acceptance of the listed functions as major aspects of the expanded role, while the physicians expressed a 7.5 percent higher