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## A SURVEY OF GENERAL PRACTICE IN NEBRASKA

Warren H. Orr

Submitted in Partial Fulfillment for the Degree of Doctor of Medicine College of Medicine, University of Nebraska

April 1, 1960

Omaha, Nebraska

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#### INTRODUCTION

One frequently reads in both the lay and professional press of the physician shortage in the United States, and even more frequently of an anticipated increased shortage in the years ahead. Others argue that the shortage of physicians is more apparent than real, believing that no shortage actually exists but that physicians are poorly distributed, there being an overabundance in the metropolitan areas and a relative dearth in the rural areas. (1)

In this era of specialization and scientific medicine there has been much speculation concerning the future of the general practitioner. Fear has been expressed that he will be unable to survive as specialism looms ever larger. (2) This fear seems unjustified. A 1956 study was made of the medical graduates for the years 1915 to 1945. It showed a steady decline in the proportion of graduates entering general practice with a corresponding increase in the number entering specialties. At the time of this survey, threefourths of the graduates of 1945 were in specialty practice. (3) However, a later study shows a reversal of this trend. In 1948, 31% of medical graduates entered general practice, in 1949, 41%, in 1953 this figure had risen to 51%. The American Medical Association Directory of 1959 reveals that 53% of today's medical practitioners are engaged in general practice. (4) It has been estimated that at the present time the general practitioners are caring for 60 to 80% of the nation's ills. (5) Statistical evidence

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is available to show that 75% of pediatric care and 75% of obstetrical care are rendered by general physicians. (6) A recent study in New York State revealed that approximately 56% of all medical services received by a group of patients was rendered by general practitioners. (7) It has been stated that the well qualified general practitioner can adequately manage 80 to 95% of illness encountered. (2, 8)

Other factors pointing to the continued need for the general practitioner exist. It has been estimated that populations from 10,000 to 150,000 are necessary to support the various specialties. Many people live, and will continue to live in rural areas. These people will continue to rely on the rural physician for the bulk of their medical care, as in many cases specialists are not immediately available.

With what appears to be a continued need for general practitioners, and rural general practitioners in particular, there are two basic problems. The first is inducing physicians to locate in rural areas, the second is to provide for their continued education once they are there. The first problem has been the most difficult. Young physicians are reluctant to forsake the facilities of the city hospitals for the "medical isolation" that they expect to find in the rural areas. One of the most successful endeavors in obtaining physicians for rural areas has been in Kansas. Under a program of community assistance for incoming physicians over 200 young physicians have located in small communities during the past ten years.

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This has been accomplished by employing two basic premises at the University of Kansas. First, it is the mission of the medical school to prepare physicians for the particular needs of the school's own geographic area. In the case of Kansas this is largely a rural area. The second mission is the continued education of those in practice. (9) This has been accomplished by an extensive postgraduate program for general practitioners. (21)

Ellis feels that it is the latter which is most often neglected. He points out that due to the wide scope of the rural general physician's practice, he needs retraining and additional training most of all, yet he has not received proper attention in postgraduate education. (10)

With these problems in mind, this study was undertaken in an attempt to more adequately define general practice as conducted in the small cities and rural areas, its scope and its nature, not only from the medical aspect but from the personal and community aspects as well.

For this study the physicians were selected from the American Medical Directory. No specific criteria were used for selection except that they be located in the smaller cities and communities. The majority are graduates of the past twenty years and almost all are graduates of the University of Nebraska College of Medicine. The reasons for selecting the smaller community physicians are inherent in the study itself. Graduates of the last twenty years and University of Nebraska graduates were preferred because questions

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were included on undergraduate training and it was felt that the more recent graduates of the same school could more meaningfully comment on this aspect.

To obtain the desired information 100 questionnaires were prepared and mailed to physicians in all sections of the state. The questionnaires were handled in such a manner as to insure anonymity on the part of the physicians answering. Except in a few instances, in which the physician elected to sign the questionnaire, I have no information as to by whom or from where the questionnaires were returned.

Of the total of 100 questionnaires mailed, 52 responses were received. These were completed in most cases, but some elected to omit certain sections or questions. For this reason the total number of responses on any one question is usually slightly less than the number of returned questionnaires.

#### THE PATIENTS IN GENERAL

The physicians were requested to complete a list of thirty consecutive office patients, indicating the age, sex, chief complaint and working diagnosis of each. The total number of patients reported was 1,416. Of these 767 (approximately 54%) were females, 649 (approximately 46%) were males. Similar analyses of patients seen in general practice also indicate a preponderance of females. (1, 11, 12, 13, 14)

In order to further analyze the patients as to age and sex they were broken down into the following age groups: 0-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, and 90 plus.

The actual number of patients in each group and their percentage of the total number of all patients is shown below:

Age Group	Male	Female	Total in Group	Percent of Total
0-10	161	143	304	21.47
11-20	48	81	129	9.10
21-30	82	162	244	17.23
31-40	64	99	163	11.51
41-50	62	71	133	9.40
51-60	90	73	163	11.51
61-70	86	80	166	11.72
71 <del>-</del> 80	41	42	83	5.86
81-90	13	15	28	1.97
90 plus	2	1	3	.02
TOTAL	649	767	1,416	100.00 approx.

It is apparent that there is actually very little difference in the numbers of each sex in various groups except in the childbearing age groups. This includes the 11-20, 21-30, and 31-40 groups with only few exceptions. One other slight trend seems to appear in the 51-60 and 61-70 age groups. Here the males slightly outnumber the females.

If the patients are considered in larger groups it can be seen that nearly one-third (30.57%) of the patients are under 21 years of age, nearly one-half (47.80%) are under 31 years of age. Approximately one-third (32.41%) are in the 31 to 60 groups, and only slightly less (29.57%) are in the over-60 years of age group.

Studies by Brooks (14) and Peterson (13) parallel this age distribution of patients closely.

#### CHIEF COMPLAINTS AND DIAGNOSES BY AGE GROUPS

The study by age groups is chiefly a study of the chief complaint and the diagnoses. Due to the multiplicity of chief complaints it was decided that the most practical approach to these would be to list only those appearing more than once in each category. This was thought sufficient to establish which are the most commonly encountered.

To facilitate the analysis of the diagnoses these were grouped into broad categories by system, with only a few exceptions.

#### 0-10 Years of Age.

In this group there were 304 patients, 161 male and 143 female, approximately 53 and 47% respectively. This represents the largest single group in the study, comprising 21.47% of the total number of patients seen.

Upon inspection of the chief complaints and the working diagnosis of this group it was evident that these did not vary with the sex of the patient as in other groups. Accordingly, no attempt was made to divide the group in this respect.

In listing the chief complaints some physicians listed more than one per patient, some listed none, and others listed a diagnosis rather than a chief complaint. Therefore the complaints listed below are as they appeared on the questionnaires, even though some cannot truly be termed "complaints."

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CHIEF COMPLAINT TOTAL TIMES LISTED Fever 39 Cough 36 Sore throat 21 18 Diarrhea Earache 17 Skin rash 11 10 Vomiting Abdominal pain 8 Draining ear 6 Enlarged tonsils and frequent tonsillitis 5 4 Cold 4 Runny nose Swelling of neck glands 4 Burns 4 Upper respiratory infections 4 Pale and listless 3 3 Fussy Anorexia 3 Convulsions 3 Lacerations 5 Remove sutures from lacerations 2 Dog bites 2 Stuffy nose 2

CHIEF COMPLAINT

Wheeze	2
Labored respirations	2
Epistaxis	2
Urinary frequency	2
Post-operative checks	2
Post-tonsillectomy checks	2
Circumcision	2

The diagnoses for this group are shown below:

## RESPIRATORY

Upper respiratory	infections		31
Bronchitis			24
Asthma			4
Pneumonia			3
Bronchiolitis			2
Influenza			2
Pneumonitis			2
		Total	64

EYE, EAR, NOSE, THROAT AND MOUTH

Tonsillitis		45
Otitis media		30
Sinusitis		8
Teething		6
Pharyngitis		5
Otitis externa		ī
Abscessed tooth		1
Hay fever		1
Epistaxis		1
Sty		1
/	Tot a l	99

TRAUMA

Fractures	11
Lacerations	10

(cont. over)

TRAUMA	(Cont.)		
	Burns Contusions Sprains Dog bites	Total	4 3 2 <u>2</u> 32
GASTRO-	INTESTINAL		
	Viral enteritis Infectious diarrhea Gastro-intestinal influenza Gastroenteritis Spastic colon Pylorospasm Formula intolerance Roundworms Pinworms Appendicitis		11 6 3 1 1 1 1 2 1 2
		Total	29
IMMUNIZ	ATIONS		
	All types	Total	25
DERMATO	LOGY		
	Infantile eczema Contact dermatitis Impetigo contagiosa Verucca vulgaris Ringworm Dermatitis Pyoderma Herpes simplex		2 2 1 2 1 1 1
		Total	12
HEMATOL	.OGY		
	Anemia Pseudohemophilia	Total	$\frac{2}{\frac{1}{3}}$
GENITO-	URINARY		
	Circumcision Cystitis Hydrocele	Total	2 4 
		iotai	0

#### INFECTIONS

Chickenpox Measles Mumps Infectious hepatitis	5 3 2 1
Roseola Total	12
NEURO-PSYCHIATRIC	
Chorea Mental retardation Foot drop Total	1 1 3
ENDOCRINE	
Pituitary abnormality Total	1
WELL BABY CHECKS AND ROUTINE PHYSICAL EXAMINATIONS	
All ages Total	<b>2</b> 9
MISCELLANEOUS	
Hernia Ingrown toenail Thrush Mesenteric adenitis Prematurity	3       
Iotal	1

The total number of diagnoses for 304 patients is 324, slightly more than one per patient. The most frequent reasons for consulting a physician in this age group are as follows: tonsillitis (45), upper respiratory infections (31), otitis media (30), routine checks (29), bronchitis (24), immunizations (24), fractures (11), viral entities (11), lacerations (10), and sinusitis (8).

The approximate percentage represented by each category is shown below:

Ear, nose, throat and mouth	30.5%
Respiratory	19.7%
Trauma	9.9%
Well baby checks and physical examinations	8.9%
Gastro-intestinal	8.9%
Immunizations	7.7%
Infections (Viral)	3.7%
Dermatology	3.7%
Genito-urinary	2.8%
Hematology	0.9%
Neurology	0.9%
Endocrine	0.3%
Miscellaneous	2.2%

It can be noted above that in this age group two categories, respiratory and ear, nose and throat, comprise approximately onehalf of all patients seen.

#### 11-20 Age Group.

There are 129 patients in this group, comprising 9.10% of the total. Of these, 48 (approximately 37%) were male, 81 (approximately 63%) were female.

Since some of the females in this group have reached childbearing age the sexes are considered separately.

#### MALES

The chief complaints for the males are shown below. Only five were listed more than one time.

CHIEF COMPLAINT		TOTAL TIMES LISTED
Sore throat		4
Shoulder pain		3
Cough		3
Knee pain		2
Sprained wrist	- 10 -	2
	-12-	

The diagnoses are as follows:

## RESPIRATORY

Asthma	2
Upper respiratory infection	1
Influenza	2
Pneumonia	1
Total	6

### TRAUMA

Gun shot wound		1
Contusion		1
Laceration		1
Sprain		6
Back strain		2
Fracture		4
	Total	15

# EYE, EAR, NOSE, THROAT AND MOUTH

Tonsillitis		7
Otitis		3
Conjunctivitis		1
	Total	11

## GASTRO-INTESTINAL

Esophageal stenosis		1
Chronic ulcerative colitis		1
Pinworms		1
Hemorrhoids		1
Appendicitis		1
	Total	5

### GENITO-URINARY

Pyelitis	2
Urethritis	1
Acute epididymitis	1
Ti	otal 4

## MUSCULOSKELETAL OTHER THAN TRAUMA

Bursitis		3
Plantar wart		1
Osgood-Schlatter's disease		1
Infected cornified area on foot		1
	Total	6

Tinea	pedis	total	1
	p = = = = =		•

MI SCELLANEOUS

Pilonidal cyst total 1

For 48 patients there were 49 diagnoses. The most common individual diagnoses are: tonsillitis (7), sprain (6), fracture (4), bursitis (3), and otitis (3).

The approximate percentage of each category is shown:

Trauma	30.6%
Ear, nose, throat and mouth	22.4%
Respiratory	12.2%
Musculoskeletal other than trauma	
Gastro-intestinal	10.2%
Genito-urinary	8.2%
Miscellaneous	4.0%
Dermatology	2.0%

## FEMALES

The chief complaints listed more than one ti	ime are shown below:
CHIEF COMPLAINT TO	TAL TIMES LISTED
Routine pre-natal examination	21
Sore throat	8
Abdominal pain	8
Low back pain	4
Routine physical examination	4
Skin rash	3
Cold	3
Cough	3
Nausea and vomiting (with pregnancy)	2
Urinary frequency and burning	2

The	diagnoses	are	shown	below:
-----	-----------	-----	-------	--------

## PREGNANCY AND COMPLICATIONS OF PREGNANCY

	Pre-natal checks on known pregnancies Missed period, probable pregnancy Nausea and vomiting of pregnancy	Total	21 1 <u>2</u> 24
GYNECOL	OGIC DISORDERS (INCLUDING BREAST)		
DESDID	Pelvic inflammatory disease Ovarian cyst Cystic mastitis	Total	1 2 1 4
	Upper respiratory infections Bronchitis	Total	4 
HEMATOL	LOGY		
	Anemi a	Total	١
EAR, NO	DSE, THROAT AND MOUTH		
	Tonsillitis Stomatitis Otitis Nasopharyngitis Hay fever	Total	4 1 1 1 1 8
TRAUMA			
	Back strain Contusion Ruptured medial meniscus	Total	3 1 <u>1</u> 5
MUSCUL	OSKELETAL OTHER THAN TRAUMATIC		
	Myositis Bunion Plantar wart Callus on foot	Total	2 1 1 

## GASTRO-INTESTINAL

Appendicitis Cholecystitis Peptic ulcer Enteritis		6 1 1	
	Total	9	
GENITO-URINARY			
Cystitis	Total	ì	
DERMATOLOGY			
Dermatitis Acne Contact dermatitis Impetigo contagiosa Ringworm Furunculosis	Total	1 1 1 1 1 	
ENDOCRINE			
Hypothyroidism Cystic adenoma of the thyroid Thyroiditis	Total	1 1 	
INFECTIONS (Viral)			
Infectious mononucleosis Infectious hepatitis	Total	$\frac{1}{2}$	
NEURO-PSYCHIATRIC			
Functional dizziness	Total	1	
MISCELLANEOUS			
Obesity Halitosis Lymphangitis	Total	$\frac{1}{3}$	
For 81 female patients there were	79 diagnoses	listed.	Those

listed most frequently were: pre-natal checks (21), tonsillitis (4),

upper respiratory infections (4), back strain (3), bronchitis (3).

The approximate percentage of each category is shown:

Pregnancy and complications of pregnancy	30.4%
Ear, nose, throat and mouth	10.1%
Respiratory	8.9%
Trauma	6.3%
Musculoskeletal other than trauma	6.3%
Dermatology	7.6%
Gynecology and breast	5.1%
Gastro-intestinal	11.4%
Endocrine	3.2%
Infections (Viral)	2.5%
Hematology	1.3%
Geni to-uri nary	1.3%
Neuro-psychiatric	1.3%
Miscellaneous	3.2%

When the chief complaints of the males and females are considered together the five most frequent are as follows: prenatal check (21), sore throat (12), abdominal pain (8), cough (5), and low back pain (4).

The diagnosis in each category for both male and female combined is shown below:

. . \_ \_ . . . .

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Pregnancy		24	24	18.7
Trauma	15	5	20	15.6
Ear, nose, throat	11	8	19	14.8
Respiratory	6	7	13	10.2
Musculoskeletal	6	5	11	8.6
Gastro-intestinal	5	9	14	10.9
Genito-urinary	4	1	5	3.9
Dermatology	1	5	6	4.8
Gynecology		4	4	3.1
Endocrine		3	3	2.3
Infection (Viral)		2	2	1.6
Hematology		1	1	.8
Neuro-psychiatric		1	1	.8
Miscellaneous	_2	_3	5	3.9
TOTALS	49	79	128	100.00%

It is evident that even in this age group a good portion of the patients are seen for pregnancy, approximately one of five of this age group coming in to the physician's office for that reason.

#### 21-30 Age Group.

This represents the second largest group in the study, comprising 17.23% of the total. Of the 244 patients in this group, 162 (66.3%) are females, 82 (33.7%) are males.

The chief complaints are as follows:

MALE	CHIEF COMPLAINT	TOTAL TIMES	LISTED
MALE	Sore throat	8	
	Earache	3	
	Cough	3	
	Epigastric pain	3	
	Low back pain	3	
	Physical examination	3	
	Chest pain	2	
	Headache	2	
	Laceration of face	2	
	Laceration of hand	2	
	Pain and swelling of end of spine	2	
	The diagnoses are as follows:		
TRAUMA			

Lacerations		7
Sprains		3
Fractures		5
Contusions		2
Traumatic ulcer		1
Back strain		4
Burns		1
	Total	23

## RESPIRATORY

URI Pneumonitis Influenza Bronchitis	Total	5 2 2 1 10
EAR, EYE, NOSE, THROAT AND MOUTH		
Tonsillitis Otitis Excessive cerumen in ear Pharyngitis Sinusitis Epistaxis Foreign body in eye	Total	5 4 1 1 1 1 1 14
DERMATOLOGY		
Contact dermatitis Tinea corporis Impetigo contagiosa Acne Trichophytosis	Total	2 2 1 1 7
GASTRO-INTESTINAL		
Diarrhea Enteritis Gastritis Pinworms	Total	2 1 1 
NEURO-PSYCHIATRIC		
Epilepsy Multiple sclerosis Poliomyelitis Neurosis	Total	1 1 1 
GENITO-URINARY		
Pyelonephritis Prostatitis	Total	     2

MUSCULOSKELETAL OTHER THAN TRAUMATIC		
Arthritis Tenosynovitis Bursitis		1
	Total	3
ROUTINE PHYSICAL EXAMINATIONS		
All types (insurance, yearly, etc.	Total	3
ENDOCRINE		
Hypothyroidism	Total	1
INFECTION (Viral)		
Mump s	Total	1
NEOPLASTIC		
Lipoma	Total	1
IMMUNIZATIONS		
All types	Total	1
MISCELLANEOUS		
Pilonidal cyst Lymphangitis	Total	2  3

For 82 male patients there were 78 diagnoses listed. Those listed most frequently were: lacerations (7), fractures (5), upper respiratory infections (5), tonsillitis (5), back strain (4), otitis (4), sprains (3), routine physical examinations (3), contusions (2), pneumonitis (2), influenza (2), contact dermatitis (2), tinea corporis (2), diarrhea (2), and pilonidal cysts (2).

The approximate percentage of each category is shown on the following page.

Trauma	29.5%
Ears, nose, throat and mouth	18.0%
Respiratory	12.8%
Dermatology	9.0%
Gastro-intestinal	6.4%
Neuro-psychiatric	5.1%
Musculoskeletal other than traumatic	3.8%
Routine physical examinations	3.8%
Genito-urinary	2.6%
Endocrine	1.3%
Infections	1.3%
Neoplastic	1.3%
Immunizations	1.3%
Miscellaneous	3.8%

# FEMALES

1

CHIEF COMPLAINT	TOTAL TIMES LISTED
Pre-natal visit	75
Sore throat	10
Post-partum check	5
Burning and frequency	4
Vaginal discharge	4
Fatigue	3
Post-operative dressing	3
Annual physical examination	3
Backache	3
Upper Respiratory Infection	3
Earache	3
Cough	2
Nervousness	2
Dyspnea	2
Diarrhea	2

CHIEF COMPLAINT (Continued)	TOTAL	TIMES	LISTED
Vomiting		2	
Pelvic pain		2	
Malaise		2	
Influenza		2	
Amenorrhea		2	
The diagnoses for this group are sh	own below:		
PREGNANCY AND COMPLICATIONS OF PREGNANCY			
Pre-natal checks on known pregnanci Missed period, probable pregnancy	es Total	81 <u>2</u> 83	
GYNECOLOGIC DISORDERS (INCLUDING BREAST)			
Trichomonas Cystic ovary Pelvic abscess Uterine fibroids Premenstrual tension Amenorrhea Sterility problem Birth control	Total	4 1 1 1 1 1 1 1	
RESPIRATORY			
Upper respiratory infection Influenza Asthma	Total	5 3 2 10	
EAR, EYE, NOSE, THROAT AND MOUTH			
Tonsillitis Sinusitis Otitis Laryngitis Vincent's angina Refraction	Total	5 3 1 1 1 14	

## GASTRO-INTESTINAL

Bowel obstruction Chronic ulcerative colitis Gastroenteritis	Total	       3
NEURO-PSYCHIATRIC		
Nervous tension Psychosomatic disorder Epilepsy	Total	4 1 <u>1</u> 6
GENITO-URINARY		
Cystitis Renal tuberculosis	Total	8 1 9
MUSCULOSKELETAL OTHER THAN TRAUMATIC		
Fibromyositis Myositis	Total	     2
TRAUMA		
Contusions Fractures	Total	3 
INFECTION (Viral)		
Infectious hepatitis	Total	1
CARDIOVASCULAR		
Varicose veins	Total	1
ENDOCRINE		
Hypothyroidism	Total	4
IMMUNIZATIONS		
Influenza	Total	1
ROUTINE PHYSICAL EXAMINATIONS		
All types	Total	1

DERMATOLOGY

Furuncle	Total	1
MISCELLANEOUS		
Obesity Abscess Vitamin deficiency Lymphangitis Wound dressing		     
	Total	5

The most frequent diagnoses are as follows: pregnancy (83), cystitis (8), upper respiratory infection (5), tonsillitis (5), trichomonas (4), nervous tension (4), hypothyroidism (4), sinusitis (3), otitis (3), influenza (3), and contusions (3).

For the 162 female patients listed there were 157 diagnoses. The approximate percentage in each category is shown below:

Pregnancy	52.8%
Ear, nose, throat and mouth, and eye	9.7%
Gynecology	7.0%
Respiratory	6.3%
Genito-urinary	5.8%
Neuro-psychiatric	3.8%
Trauma	2.6%
Endocrine	2.6%
Gastro-intestinal	1.9%
Musculoskeletal	1.3%
Routine physical examination	1.3%
Cardiovascular	.6%
Infection (Viral)	.6%
Immunizations	.6%
Miscellaneous	3.1%

When the chief complaints of both male and female patients are considered together, the most frequently mentioned are: prenatal visits (75), sore throat (18), earache (6), cough (5), and routine physical examinations (5). The diagnoses by category for both male and female combined

are shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT <b>OF</b> TOTAL
Pregnancy		83	83	35.3
Trauma	23	4	27	11.6
Ear, nose, throat	14	14	28	12.5
Respiratory	10	10	20	8.5
Gynecology		11	11	4.7
Gastro-intestinal	5	3	8	3.4
Neuro-psychiatric	4	6	10	4.3
Dermatology	7	0	7	3.0
Musculoskeletal	3	2	5	2.1
Physical exam.	3	2	5	2.1
Endocrine	1	4	5	2.1
Immunization	1	1	2	0.8
Infections	1	1	2	0.8
Neoplasm	1	0	1	0.4
Cardiovascular	0	1	1	0.4
Miscellan <b>e</b> ous	3	6	9	3.9
Genito-urinary	2	9	11	4.7
Totals	78	157	235	100.00%

## 31-40 Age Group.

There are 163 patients in this group, comprising 11.51% of the total. Of these, 64 are male and 99 are female, 39.3% and 60.7% respectively.

## MALE

The chief complaints appearing more than	once are shown below:
CHIEF COMPLAINT	TOTAL TIMES LISTED
Routine physical examination	7
Chest pain	4
Sore throat	4
Back pain	3
Knee pain	2
Abdominal pain	2

-25-

	CHIEF COMPLAINT	(Continued)	TOTAL	TIMES LISTED
	Cold			2
	Difficult urinati	on		2
	Dizziness			2
	Headache			2
	Hernia			2
	Post-operative cl	neck		2
	Immunization			2
	The diagnoses are	e as follows:		
RESPIRA	ATORY			
	Influenza Upper respirator Pneumonia Pleuritis	y infection	Total	4 3 1 <u>1</u> 9
EAR, EY	YE, NOSE, THROAT			
	Otitis media Tonsillitis Foreign body in (	еуе	Total	1 4 
ROUTINE	E PHYSICAL EXAMIN	ATION		
	Insurance, pre-e	mployment, pilots	Total	5
TRAUMA				
	Back strain Contusion Fracture Burns Sternoclavicular Laceration Torn medial ligar Sprain	dislocation ment of knee		3 1 1 1 1 1 1

 $\frac{1}{10}$ 

Total

## GENITO-URINARY

U U V	lrethral stricture lrethritis 'asectomy	Totol	2 1 1
GASTRO-I	NTESTINAL	Ισται	4
dajino i	ALSTINAL		
C R D H A	cholecystitis lectal polyps Duodenal ulcer lemorrhoids Appendicitis	Total	1 1 1 1 5
MUSCULOS	KELETAL OTHER THAN TRAUMATIC		
R M	heumatoid arthritis Nyositis	Total -	1 1 2
DERMATOL	OGY		
U N C F	Irticaria Ievi (benign) Cellulitis Folliculitis	Total	1 1 1 
NEURO-PS	SYCHIATRIC		
P N M	Psychosomatic disorder leuralgia ligraine	Total	3 1 1 5
IMMUNIZA	TIONS		
A	All types	Total	2
CARDIOVA	SCULAR		
v	aricose veins	Total	1
HEMATOLO	θGΥ		
P	Polycythemia vera Anemia	Total	1 1 2

ENDOCRINE

Diabetes	Total	1
MISCELLANEOUS		
Calcium deficiency		1
Obesity		1
Family problem		1
Inquinal hernia		2

For 64 patients there were 63 diagnoses. The most common individual diagnoses are: routine physical examination (7), influenza (4), tonsillitis (4), back strain (3), and psychosomatic disorders (3).

The approximate percentage in each category is shown below:

Total

5

Trauma	15.9%
Respiratory	14.3%
Routine physical examination	11.1%
Ears, nose, throat	9.5%
Neuro-psychiatric	7.9%
Geni to-uri nary	6.3%
Gastro-intestinal	7.9%
Dermatology	6.3%
Musculoskeletal	3.2%
Immunizations	3.2%
Hematology	3.2%
Cardiovascular	1.6%
Endocrine	1.6%
Miscellaneous	7.9%

## FEMALE

The chief complaints listed more than one time are shown below:

Chief Complaint	Total Times Listed
Routine pre-natal examination	18
Sore throat	10
Epigastric pain	4
Pain in right upper quadrant	4
Pruritis vulva	4
Yearly or routine physical examination	4

	Chief Complaint (Continued)	Total	Times	Listed
	Vaginal discharge Immunizations Headache Fatigue Chest pain Obesity Pain in lower abdomen Dysmenorrhea Dyspnea Cough Malaise		4 3 3 2 2 2 2 2 2 2	
	The diagnoses are shown below:			
PREGNAM	ICY			
	Pre-natal check Missed period,probable pregnancy Post-partum check	Total	18 2 1 21	
GYNECOL	OGY INCLUDING BREAST			
	Monilial vaginitis Chronic cervicitis Ovarian cyst Menorrhagia Cervical stenosis (post-cautery) Uterine fibroid Fibroadenoma of breast Cystic mastitis Endometriosis	Total	5 4 1 1 1 1 1 17	
TRAUMA				
	Burn Laceration Sprain	Total	1 1 	
RESPIRA	ATORY			
	Influenza Bronchitis Pneumonia Pleuritis	Total	4 2 1 	

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#### EAR, NOSE AND THROAT Pharyngitis 7 Tonsillitis 2 Sinusitis 2 Otitis media 1 Epistaxis 1 Total 13 GASTRO-INTESTINAL Cholecystitis 3 Ulcerative colitis 1 Gastritis 1 Spastic colon 1 Spastic stomach 1 Total 7 NEURO-PSYCHIATRIC 8 Psychosomatic disorders Tension headache Total 9 DERMATOLOGY Total 1 Acne ENDOCRINE Hypothyroidism Total 1 GENITO-URINARY Cystitis Total 1 HEMATOLOGY Anemia Total 2 CARDIOVASCULAR Total 1 Hypertension IMMUNIZATIONS Total 4 All types ROUTINE PHYSICAL EXAMINATION Pre-employment, annual, etc. Total 5

#### MISCELLANEOUS

Penicillin reaction Fatigue Obesity Ganglion on wrist Allergy Inguinal hernia



For 99 patients there were 99 diagnoses listed. Those most frequently mentioned were: pregnancy (21), pharyngitis (7), psychosomatic disorders (8), monilial vaginitis (5), and chronic cervicitis (4).

The approximate percentage for each category is shown below:

Pregnancy	21.1%
Gynecology	17.2%
Ear, nose and throat	13.1%
Respiratory	8.1%
Neuro-psychiatric	9.1%
Gastro-intestinal	7.1%
Trauma	3.0%
Routine physical examination	5.0%
Immunization	4.1%
Hematology	2.1%
Dermatology	1.0%
Cardiovascular	1.0%
Endocrine	1.0%
Miscellaneous	6.0%

The chief complaints of the males and females being considered together, the five most frequent are as follows: pre-natal check (21), sore throat (12), routine physical (11), back pain (7), abdominal pain (10).

The diagnoses by category for both male and female patients are shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Pregnancy		21	21	12.9
Gynecology		17	17	10.5
Respiratory	9	8	17	10.5
Ear, nose and throat	6	13	19	11.7
Trauma	10	3	13	8.0
Routine physical	7	5	12	7.4
Neuro-psychiatric	5	9	14	8.6
Geni to-urinary	4	1	5	3.1
Gastro-intestinal	5	7	12	7.4
Dermatology	4	1	5	3.1
Musculoskeletal	2	0	2	1.2
Hematology	2	2	4	2.5
Cardiovascular	1.	1	2	1.2
Endocrine	1	1	2	1.2
Immunization	2	4	6	3.7
Miscellaneous	5	6	11	6.8
Totals	63	99	162	100.00%

## 41-50 Age Group.

There are 133 patients in this group, comprising 9.40% of the total. Of these, 62 are male and 71 are female, 46.6% and 53.4% respectively.

#### MALE

The chief complaints appearing more than once are shown below:

Chief Complaint	Total	Times	Listed
Chest pain		6	
Fracture follow-up		3	
Cough		3	
Epigastric pain		3	
Anal pain		2	
Sore throat		2	

The diagnoses are as follows:

## RESPIRATORY

Bronchitis			3
Pneumonia			2
	(Cont	over)	

(Cont. over)
RESPIRATORY (Continued)		
Upper respiratory infection Pleural effusion Pleuritis		
	Tot	al 8
EAR, EYES, NOSE THROAT AND MOUTH		
Foreign body in eye Otitis media Nasal polyps Labyrinthitis Sinusitis Tonsillitis		2
Abscessed tooth		
	Tot	al 9
ROUTINE PHYSICAL EXAMINATION		
Insurance and pre-employment	Tot	al 2
TRAUMA		
Fracture Laceration Hematoma of knee Burn Sprain Traumatic amputation of thumb Contusion		5 3 1 1 1
Gun shot wound	Tot	al $\frac{1}{14}$
GENITO-URINARY		
Prostatitis Cystitis Epididymitis Orchitis Urethritis		
	Tot	al 5
GASTRO-INTESTINAL		
Hemorrhoids Duodenal ulcer Rectal fistula	(Cont. ove	4 3 3

•

GASTRO-INTESTINAL (Continued)		
Gastritis Cholecystitis Appendicitis	Total	1 1 
MUSCULOSKELETAL OTHER THAN TRAMA		
Rheumatoid arthritis Myositis	Total	$\frac{1}{2}$
NEURO-PSYCHIATRIC		
Psychosomatic disorder	Total	1
CARDIOVASCULAR		
Angina pectoris Hypertension	Total	2  
IMMUNIZATIONS		
Influenza	Total	1
HEMATOLOGY		
Pernicious anemia	Total	1
ENDOCRINE		
Diabetes	Total	2
NEOPLASTIC		
Carcinoma of the stomach	Total	1
MISCELLANEOUS		
Abscess Obesity Alcoholism Inguinal hernia	Total	1 1 

For 62 patients there are 67 diagnoses. The most common individual diagnoses are: fracture (5), laceration (3), bronchitis (3), hemorrhoids (4), duodenal ulcer (3), and rectal fistula (3).

The approximate percentage in each category is shown below:

Trauma	20.9%
Gastro-intestinal	19.4%
Ear, eyes, nose, throat and mouth	13.4%
Respiratory	11.9%
Geni to-uri nary	7.5%
Cardiovascular	6.0%
Routine physical examination	3.0%
Musculoskeletal other than trauma	3.0%
Endocrine	3.0%
Neuro-psychiatric	1.5%
Immunizations	1.5%
Hematology	1.5%
Neoplastic	1.5%
Miscellaneous	6.0%

#### FEMALE

The chief complaints listed more than once are shown below:

	Chief Complaint	Total	Times	Listed
	Post-menopausal or intermenstrual & Cough Elevated temperature Joint pain Hot flashes Right upper quadrant pain Nervousness Sore throat Fatigue Malaise Routine physical examination The diagnoses are shown below:	bleeding	7 7 3 2 2 2 2 2 2 2	
PREGNA	NCY			
	Pre-natal check	Total	1	

#### GYNECOLOGY INCLUDING BREAST

Menopause syndrome

7

# GYNECOLOGY (Continued)

Cystocele and rectocele		2
Atrophic vaginitis		1
Vaginitis		1
Endometriosis		1
Uterine fibroids		i
	Total	11

#### TRAUMA

Sprain		1
Fracture		1
	Total	2

### RESPIRATORY

Upper respiratory infection	3
Pneumonitis	3
Pneumonia	2
Bronchitis	1
Total	9

## EAR, EYES, NOSE, THROAT AND MOUTH

Otitis media	2
Sinusitis	1
Stomatitis	1
Laryngitis	1
Chalazion	1
Total	6

### GASTRO-INTESTINAL

Hemorrhoids	3
Cholecystitis	2
Biliary dyskinesia	1
Hydropic gall bladder	1
Hyperacidity	1
Ulcerative colitis	1
Obstipation	1
Total	10

### NEURO-PSYCHIATRIC

Psychosomatic disorder		5
Neurofibromatosis		1
	Total	6

## CARDIOVASCULAR

Rheumatic heart disease Mitral stenosis Parovysmal auricular techycordia		1
Hypertension	Total	- <u>1</u> - <u>4</u>
MUSCULOSKELETAL OTHER THAN TRAUMA		
Rheumatoid arthritis Arthritis Myositis	Total	2 1 
DERMATOLOGY		
Pityriasis rosea Verruca vulgaris Furunculosis	Total	1 1 
ENDOCRINE		
Hypothyroidism Diabetes	Total	1 
GENITO-URINARY		
Pyelitis	Total	1
ROUTINE PHYSICAL EXAMINATION		
Yearly examination	Total	2
IMMUNIZATIONS		
Influenza	Total	2
NEOPLASTIC DISEASE		
Carcinoma of the breast	Total	1
MISCELLANEOUS		
Abscess Lupus erythematosis	Total	2  3

For 71 female patients there were 68 diagnoses listed. The most commonly mentioned individual diagnoses are as follows: menopausal syndrome (7), psychosomatic disorder (5), upper respiratory infection (3), pneumonitis (3), and hemorrhoids (3).

The approximate percentage in each category is shown below:

Gynecology including breast	16.1%
Gastro-intestinal	14.6%
Respiratory	13.1%
Ear, eyes, nose, throat and mouth	8.8%
Neuro-psychiatric	8.8%
Musculoskeletal other than trauma	7.4%
Cardiovascular	6.0%
Dermatology	4.4%
Trauma	3.0%
Endocrine	3.0%
Routine physical examination	3.0%
Immunizations	3.0%
Geni to-uri nary	1.5%
Pregnancy	1.5%
Neoplastic	1.5%
Miscellaneous	4.4%

If the chief complaints of the males and females are considered together without regard to sex the most frequent are as follows: cough (10), post-menopausal or intermenstrual bleeding (7), chest pain (6), sore throat (4), joint pain (3), hot flashes (3), epigastric pain (3), and routine physical examination (3).

The diagnoses by category for both male and female combined are shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Gastro-intestinal	13	10	23	17.0
Respiratory	8	9	17	12.6
Trauma	14	2	16	11.9
EENT	9	6	15	11.1
Gynecology		11	11	8.2
Cardiovascular	4	4	8	6.0

(cont. over)

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL	
Musculoskeletal	2	5	7	5.2	
Neuro-psychiatric	1	6	7	5.2	
Miscellaneous	4	3	7	5.2	
Genito-urinary	5	1	6	4.4	
Routine physical	2	2	4	3.0	
Endocrine	2	2	4	3.0	
Immunizations	1	2	3	2.2	
Dermatology		3.	3	2.2	
Neoplastic	1	1	2	1.5	
Hematology	1	-	1	0.8	
Pregnancy		1	1	0.8	
Totals	67	68	135	100.00%	

#### 51-60 Age Group.

There are 163 patients in this group, comprising 11.51% of the total. Of these 90 are male and 73 are female, 55.2% and 44.8%, respectively.

The chief complaints appearing more than once are shown below: MALE Chief Complaint Total Times Listed Epigastric pain 7 4 Backache 4 Chest pain 4 Depression 4 Dyspnea 4 Routine blood pressure check 3 Dizziness 3 Headache 3 Cough 2 Joint pain 2 Fatique Right upper quadrant pain 2 Dysuria 2 2 Pain in the knees 2 Bulge in inguinal region Stuffy nose 2 2 Pain in eye 2 Routine physical examination

The diagnoses are as follows:

## RESPIRATORY

Pneumonia Bronchitis Influenza Asthma Pneumonitis		2 1 1 1
Upper respiratory infection Emphysema	Total	1 
EARS, EYES, NOSE, THROAT AND MOUTH		
Sinusitis Foreign body in eye Epistaxis		2 2 1
Mycosis of external canal	Total	<u> </u>
ROUTINE PHYSICAL EXAMINATION		
Pre-employment and insurance	Total	2
TRAUMA		
Strained back Laceration Fracture Contusion Amputation Burns		2 2 2 2 2
	Total	11
GENITO-URINARY		
Cystitis Pyelitis Prostatitis Benign prostatic hypertrophy Hydrocolo		1 1 1
пустосете	Total	5
MUSCULOSKELETAL OTHER THAN TRAUMA		
Gouty arthritis Arthritis Intervertebral disc syndrome	Total	2 1 1

## CARDIOVASCULAR

	Hypertension Myocardial infarct Angina pectoris Congestive heart failure Cerebral vascular accident Hypotension Subacute bacterial endocarditis Anticoagulant therapy	Total	4 3 2 2 1 1 1 18
GASTRO-	INTESTINAL		
	Duodenal ulcer Cholecystitis Diaphragmatic hernia Hemorrhoids Abscessed tooth	Total	6 3 1 1 1 12
DERMATO	DLOGY		
	Sebaceous cyst Cellulitis Lichen planus Verruca vulgaris	Total	$\frac{3}{2}$ $\frac{1}{7}$
NEURO-F	PSYCHIATRIC		
	Depression	Total	3
IMMUNIZ	ZATION		
	Influenza	Total	1
MISCELL	ANEOUS		
	Obesity Nicotine poisoning Alcoholism Brucellosis Inguinal hernia	Total	1 1 1 <u>3</u> 7

For the 90 patients there are 84 diagnoses. The most common individual diagnoses are as follows: duodenal ulcer (6), hypertension

(4), myocardial infarct (4), angina pectoris (3), cholecystitis (3), depression (3).

The approximate percentage in each category is shown below:

Cardiovascular	21.4%
Gastro-intestinal	14.3%
Traumatic	13.1%
Respiratory	9.5%
Dermatology	8.3%
EENT	7.7%
Geni to-uri nary	6.0%
Musculoskeletal other than trauma	4.8%
Neuro-psychiatric	3.6%
Routine physical examination	2.4%
Immunizations	1.2%
Miscellaneous	8.3%

## FEMALE

The chief complaints listed more than once are shown below:

Chief Complaint	Total Times Listed
Headache	7
Back pain	5
Right upper quadrant pain	5
Routine blood pressure check	5

Noutific brood pressure check	
Cough	4
Chest pain	4
Fatique	4
Depression	2
Joint pain	2
Right lower quadrant pain	2
Earache	2
Sore throat	2
Dizziness	2

The diagnoses are shown below:

### RESPIRATORY

Upper respiratory infection		3
Bronchitis		2
Bronchiectasis		1
Pleuritis		1
	Total	7

## CARDIOVASCULAR

Hypertension Congestive heart failure Angina pectoris Myocardial infarction Stasis ulcer of leg	Total	8 1 1 1 12
NEURO-PSYCHIATRIC		
Psychosomatic Neuritis Functional disorder Migraine headache Encephalitis Bell's palsy	Total	5 2 1 1 1 1 11
EAR, EYES, NOSE, THROAT AND MOUTH		
Pharyngitis Otitis media Glossitis Nasal polyps Glaucoma Infected eyelid	Total	3 1 1 1 1 1 8
MUSCULOSKELETAL OTHER THAN TRAUMA		
Arthritis Myositis Intervertebral disc syndrome Osteoarthritis Osteoporosis	Total	4 2 1 <u>1</u> 10
GASTRO-INTESTINAL		
Cholecystitis Hemorrhoids	Total	2 
GENITO-URINARY		
Cystitis Pyelitis Kidney abscess	Total	       3

+ )

## ENDOCRINE

	Diabetes mellitus Hypothyroidism	Total	$\frac{3}{\frac{1}{4}}$		
HEMATO	LOGY				
	Anemia Leukemia	Total	2 1 3		
TRAUMA	T I C				
	Contusion Strain	Total	3 1 4		
DERMAT	DLOGY				
	Eczema of face	Total	1		
GYNECO	LOGY INCLUDING BREAST				
	Menopause syndrome Mass in breast – benign	Total	3 <u>1</u> 4		
NEOPLA	STIC				
	Carcinoma of breast Carcinoma of lung Carcinoma of endometrium	Total	1 1 1 3		
MISCEL	LANEOUS				
	Alsoholism	Total	1		
	For the 73 female patients there are	73 diagnoses.	The most		
common	individual diagnoses are as follows:	hypertension	(8),		
psychosomatic disorder (5), arthritis (4), upper respiratory infec-					
tion (	tion (3), pharyngitis (3), diabetes mellitus (3), contusion (3),				
and me	nopause syndrome (3).				

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The approximate percentage in each category is	s shown below:
Cardiovascular	16.0%
Neuro-psychiatric	14.8%
Musculoskeletal other than traumatic	13.4%
Ear, eyes, nose, throat and mouth	10.7%
Respiratory	9.3%
Gastro-intestinal	5.3%
Endocrine	5.3%
Trauma	5.3%
Gynecology including breast	5.3%
Genito-urinary	4.0%
Hematology	4.0%
Neoplastic	4.0%
Dermatology	1.3%
Miscellaneous	1.3%

When the chief complaints of males and females are considered together, the most frequent are as follows: headache (10), back pain (9), routine blood pressure check (9), chest pain (8), epi-gastric pain (7), right upper quadrant pain (7), and cough (7).

The diagnoses by category for both male and female combined is shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Cardiovascular	18	12	30	18.8
Gastro-intestinal	12	4	16	10.0
Respiratory	8	7	15	9.3
Trauma	11	4	15	9.3
EENT	6	8	14	8.7
Neuro-psychiatric	3	11	14	8.7
Musculoskeletal	4	10	14	8.7
Dermatology	7	1	8	5.0
Miscellaneous	7	1	8	5.0
Genito-urinary	5	3	8	4.9
Endocrine	0	4	4	2.5
Gynecology		4	4	2.5
Hematology	0	3	3	1.8
Neoplastic disease	0	3	3	1.8
Routine physical	2	0	2	1.3
Immunization	1	0	1	0.6
Totals	84	75	159	100.00%

# 61-70 Age Group.

There are 166 patients in this group, comprising 11.72% of the total. Of these, 86 are male and 80 are female, 51.8% and 48.2%, respectively.

## MALE

The chief	complaints	appearing	more	than	once	are st	own	below:
Chief Com	phaint				Total	Times	Li	sted
Back pain Cough Dyspnea Chest pain Chills and Dysuria Routine b Immunizat Epigastri Painful jo Earache Skin rash Sore thro Shoulder Dizziness	n fever lood pressur ions c pain oints at pain	re check				4443333222222222		
Depressio Weakness Headache	n					2 2 2		
The diagn	oses are as	follows:						
RESPIRATORY								
Asthma Upper res Pneumonia Influenza	piratory in	fection		То	tal	2 8 1 <u>1</u> 12		
EARS, EYES, NOSE	, THROAT AN	D MOUTH						
Sinusitis Otitis me Pharyngit Tonsillit Eustachia	dia is is nitis			То	tal	1 1 1 1 5		

## CARDIOVASCULAR

Hypertension Myocardial infarction Congestive heart failure Angina pectoris Cerebral vascular accident Arteriosclerotic heart disease Aortic stenosis Orthostatic hypotension Arteriosclerosis		6 4 3 1 1 1
ALTERIOSCIETOSIS	Total	21
GASTRO-INTESTINAL		
Duodenal ulcer Hemorrhoids Gastric ulcer Cholecystitis Appendicitis		2 2 1 1
	Total	7
MUSCULOSKELETAL OTHER THAN TRAUMATIC		
Bursitis Rheumatoid arthritis Osteoarthritis Myositis		2 1 1
.,	Total	5
IMMUNIZATIONS		
All types	Total	4
DERMATOLOGY		
Dermatitis Dermatitis medicamentosa Pyoderma Herpes zoster Infected callus	Total	2 1 1 1 
	, o cu ,	Ū
Carcinoma of the lung Carcinoma of the prostate Carcinoma of the pancreas Carcinoma of the larynx Carcinomatosis	<b>T</b> 1	2 2 1 1
	lotal	7

#### NEURO-PSYCHIATRIC

Functional disorder Depression Sciatica	Total	3 2 
TRAUMA		
Dislocation Burn	Total	  2
GENITO-URINARY		
Benign prostatic hyperplasia Cystitis	Total	4 <u>1</u> 5
HEMATOLOGY		
Leukemia Pernicious anemia	Total	  2
ENDOCRINE		
Diabetes mellitus	Total	7
MISCELLANEOUS		
Hematuria due to anticoagulant therap	y Total	2 2

For the 86 male patients there are 91 diagnoses. The most common individual diagnoses are as follows: upper respiratory infection (8), diabetes mellitus (7), hypertension (6), benign prostatic hyperplasia (4), myocardial infarction (4), functional disorder (3), congestive heart failure (3), and angina pectoris (3). The approximate percentage in each category is shown below:

	<b>2 2 3 3 3</b>
Cardiovascular	23.1%
Respiratory	13.2%
Gastro-intestinal	7.7%
Neoplastic	7.7%
Endocrine	7.7%
Dermatology	6.6%
Neuro-psychiatric	6.6%
Ear, eyes, nose, and throat	5.5%
Musculoskeletal other than traumatic	5.5%
Genito-urinary	5.5%
Immunizations	4.4%
Trauma	2.2%
Hematology	2.2%
Miscellaneous	2.2%

## FEMALE

The chief complaints listed more than once are shown below:

Chief Complaint	Total	Times	Listed
Dyspnea		9	
Fatigue		6	
Joint pain		5	
Dizziness		4	
Headache		4	
Routine blood pressure check		4	
Cough		3	
Lesions on face		3	
Routine diabetic check		3	
Skin rash		2	
Abdominal pain		2	
Constipation		2	
Backache		2	
Urinary frequency		2	
Immunization		2	
Depression		2	
Malaise		2	
Chest pain		2	

The diagnoses are shown below:

## RESPIRATORY

Influenza		3
Pneumonia		2
Asthma		1
Upper Respiratory infection		1
Bronchitis		1
	Total	8

## CARDIOVASCULAR

Hypertension Congestive heart failure Angina pectoris Arteriosclerotic heart disease Myocardial infarction Post-infarction check		12 6 2 1 1
NEURO-PSYCHIATRIC	Total	23
Arachnoiditis Parkinson's disease Depression Psychosomatic	Total	1 1 - <u>1</u> -4
EARS, EYES, NOSE, THROAT AND MOUTH		
Tonsillitis Lesion on gums due to dental allergy Pharyngitis	Total	$\frac{1}{\frac{1}{3}}$
MUSCULOSKELETAL OTHER THAN TRAUMATIC		
Arthritis Rheumatoid arthritis Myositis Ganglion of the wrist	Total	3 1 1 
GASTRO-INTESTINAL		
Cholecystitis Spastic colon Peptic ulcer Enteritis Colitis		2       
	Total	6
GENITO-URINARY		
Cystitis	Total	3
ENDOCRINE		
Diabetes mellitus Hyperthyroidism	Total	$\frac{7}{-1}$

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### HEMATOLOGY

	Pernicious anemia Anemia	Total	$\frac{1}{2}$
TRAUMAT	TIC		
	Laceration Burn	Total	$\frac{2}{1}$
DERMAT	DLOGY		
	Herpes zoster Carbuncle Contact dermatitis Eryisipelas	Total	2 2 1 
IMMUNI	ZATIONS		
	All types	Total	3
NEOPLA	STIC DISEASE		
	Carcinoma of the breast Metastatic carcinoma to the spine Basal cell carcinoma of the face Carcinoma of the colon Carcinoma of the cervix	Total	1 1 1 
MISCEL	LANEOUS		
	Post-operative check	Total	1
	For the 80 female patients 82 diagnos	es are lis	ted. Those
listed	most frequently are as follows: hype	rtension (	2), diabetes
mellit	us (7), congestive heart failure (6),	influenza	(3), arthritis
(3), a	nd cystitis (3).		
	The approximate percentage in each ca	tegory is	shown below:
Cardio Endocr Respir	vascular ine atory		28.0% 9.8% 9.8%

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(cont. over)

Musculoskeletal other than traumatic	7.3%
Gastro-intestinal	7.3%
Dermatology	7.3%
Neoplastic	6.1%
Neuro-psychiatric	4.9%
Ear, eyes, nose, mouth and throat	3.7%
Geni to-uri nary	3.7%
Trauma	3.7%
Hematology	3.7%
Immunizations	3.7%
Miscellaneous	1.2%

When the chief complaints of males and females of this group are considered together the most frequent are as follows: dyspnea (11), cough (7), blood pressure check (7), joint pain (7), fatigue (6), dizziness (6), headache (6), chest pain (6), and back pain (6).

The diagnoses by category for both male and female combined is shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Cardiovascular	21	23	444	25.4
Respiratory	12	8	20	11.5
Endocrine	7	8	15	8.6
Gastro-intestinal	7	6	13	7.5
Dermatology	6	6	12	7.0
Neoplastic	7	5	12	7.0
Musculoskeletal	5	6	11	6.4
Neuro-psychiatric	6	4	10	5.8
EENT	5	3	8	4.6
Genito-urinary	5	3	8	4.6
Immunizations	4	4	7	4.0
Trauma	2	3	5	2.9
Hematology	2	3	5	2.9
Miscellaneous	2	ĩ	3	1.7
Totals	91	82	173	100.00%

### 71-80 Age Group.

There are 83 patients in this group, comprising 5.86% of the total. Of these, 41 are male and 42 are female, 50.6% and 49.4%, respectively.

The chief complaints appearing more than once are shown below:

Chief Complaint	Total Times Listed
Dyspnea Abdominal pain	3 2
Routine blood pressure check	2
Dizziness	2
Headache	2

The diagnoses are as follows:

## RESPIRATORY

Pneumonitis		2
Influenza		1
Asthma		1
Emphysema		1
	Total	5

### CARDIOVASCULAR

Hypertension	5
Myocardial infarction	2
Arteriosclerotic heart disease	1
Angina pectoris	1
Diabetic ulcer of leg	1
Congestive heart failure	1
Cerebral vascular accident	1
Ruptured aortic aneurysm, dead on arrival	1
Total	13

### GASTRO-INTESTINAL

Marginal ulcer		1
Constipation		1
Obstructed colon		1
Gastroenteritis		1
Cholecystitis		1
	Total	5

# EARS, EYES, NOSE, THROAT AND MOUTH

Glaucoma		1
Pharyngitis		1
	Total	2

# MALE

NEOPI	LASM
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Basal cell carcinoma of the face Carcinoma of the prostate Carcinoma of the bladder	Total	2 1 
HEMATOLOGY		
Pernicious anemia Chronic leukemia	Total	2 
ENDOCRINE		
Diabetes mellitus	Total	3
TRAUMA		
Fractured hip	Total	ì
MUSCULOSKELETAL OTHER THAN TRAUMA		
Osteoarthritis Bursitis	Total	$\frac{2}{1}{3}$

#### MISCELLANEOUS

Ingrown toenail

Total

1

For the 41 male patients there are 40 diagnoses listed. The most common individual diagnoses are as follows: hypertension (5), diabetes mellitus (3), osteoarthritis (2), basal cell carcinoma (2), pernicious anemia (2), myocardial infarction (2), and pneumonitis (2).

The approximate percentage in each category is shown below:

Cardiovascular	32.5%
Respiratory	12.5%
Gastro-intestinal	12.5%
Neoplasm	10.0%
Hematology	7.5%
Endocrine	7.5%
Musculoskeletal other than traumatic	7.5%
Ears, eyes, nose, throat and mouth	5.0%
Trauma	<b>2.</b> 5%
Miscellaneous	2.5%

# FEMALE

	The ch	ief c	omplaint	5	listed	more	than	once	are	shown	below:
	Chief	Compl	aint					То	otal	Times	Listed
	Routin Dizzin Pain i Malais Cough Headac Weakne Right Nausea Hemipl	ne blo ness n che se che ss upper a and legia	od press st quadrar vomiting	nt	re exam pain	inatio	n			4 3 2 2 2 2 2 2 2 2 2 2 2 2	
	The di	agnos	es are a	a s	follow	s:					
RESPIRA	AT OR Y										
	Upper Influe Bronch Pneumo	respi enza hitis onia	ratory	in	fection			Tota	1	$2$ $2$ $1$ $-\frac{1}{6}$	
CARDIO	VASCULA	٩R									
	Hypert Cerebr Conges Cerebr Arteri Diabet Varico	tensio ral va stive ral an ioscle tic le ose le	n scular heart fa eurysm rotic la g ulcer g ulcer	ac ai eg	cident lure ulcer			Tota	1	6 4 1 2 1 1 	
GASTRO	- INTEST	TINAL									
	Hiata Peptic Gastro Choleo	l hern c ulce oenter cystit	ia r itis is					Tota	1	1 1 - <u>1</u> -4	
TRAUMA	Fracto Fracto Fracto	ured h ured a ured r	ip mr ibs		-55	5-		Tota	1	2 1 	

MUSCULOSKELETAL OTHER THAN TRAUMATIC		
Arthritis Osteoarthritis Sprained ankle		   
	Total	3
GENITO-URINARY		
Cystitis	Total	3
ENDOCRINE		
Diabetes mellitus	Total	2
NEURO-PSYCHIATRIC		
Senile depression	Total	1
HEMATOLOGY		
Anemia	Total	1
NEOPLASM		

Cerebral metastases from carcinoma of the stomach Total 1

IMMUNIZATIONS

Influenza

Total l

For the 42 female patients 43 diagnoses listed. Those listed most frequently are as follows: hypertension (6), cerebral vascular accident (4), cystitis (3), influenza (2), upper respiratory infection (2), congestive heart failure (2), arteriosclerotic leg ulcer (2), fractured hip (2), and diabetes (2).

The approximate percentage in each category is shown below:

Cardiovascular	39.9%
Respiratory	31.9%
Gastro-intestinal	9.3%
Trauma	9.3%
Musculoskeletal other than traumatic	7.0%

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(cont. over)

7.0%
4.6%
2.3%
2.3%
2.3%
2.3%

When the chief complaints of both male and female are considered together the most frequent are as follows: routine blood pressure check (6), dizziness (5), headache (4), dyspnea (3), and abdominal pain (3).

The diagnosis by category for both males and females is shown below:

CATEGORY	MALE	FEMALE	TOTAL	PERCENT OF TOTAL
Cardiovascular	13	17	30	36.2
Respiratory	5	6	11	13.3
Gastro-intestinal	5	4	9	10.8
Musculoskeletal	3	3	6	7.2
Neoplastic	4	1	5	6.0
Endocrine	3	2	5	6.0
Trauma	1	4	5	6.0
Hematology	3	1	4	4.8
Genito-urinary	0	3	3	3.6
EENT	2	0	2	2.5
Immunizations	0	1	1	1.2
Neuro-psychiatric	0	1	1	1.2
Miscellaneous	1	0	1	1.2
Totals	40	43	83	100.00%

#### 81-90 Age Group.

There are 28 patients in this group, comprising 1.97% of the total. Of these, 13 are male and 15 are female, 46.4% and 53.6%, respectively. Due to the smallness of the group and the similarity of the chief complaint and diagnoses both males and females are considered together.

	The chief complaints appearing more	than once	are shown below:
	Chief Complaint	Tota	l Times Listed
	Dyspnea Chest pain Dizziness Cough Weakness on one side of body		4 3 2 2 2
	The diagnoses are as follows:		
CARDIO	ASCULAR		
	Congestive heart failure Hypertension Cerebral vascular accident Angina pectoris Myocardial infarction	Total	4 2 1 
RESPIRA	ATORY		
	Upper respiratory infection Pneumonia	Total	$\frac{2}{\frac{1}{3}}$
TRAUMA			
	Fractured hip	Total	1
GASTRO	-INTESTINAL		
	Fecal impaction	Total	1
ENDOCR	INE		
	Diabetes mellitus	Total	1
MUSCUL	DSKELETAL OTHER THAN TRAUMATIC		
	Arthritis Myositis	Total	<u> </u> <u> </u> 2
DERMAT	DLOGY		
	Plantar wart	Total	1

EARS, EYES, NOSE AND THROAT

Herpes zoster ophthalmica	Total	1
NEURO-PSYCHIATRIC		
Parkinson's disease	Total	1
IMMUNIZATIONS		
Influenza	Total	1
MISCELLANEOUS		
Infected ingrown toenail		1

	•
Strangulated inguinal hernia	1
Strangulated femoral hernia	1
Total	3

For the 28 patients in this group 27 diagnoses are listed. The most frequent are as follows: congestive heart failure (4), hypertension (4), cerebral vascular accident (2), and upper respiratory infection (2).

The approximate percentage in each category is shown below:

Cardiovascular	44.4%
Respiratory	11.2%
Musculoskeletal other than traumatic	7.2%
Trauma	3.6%
Gastro-intestinal	3.6%
Endocrine	, 3.6%
Dermatology	3.6%
Ear, eye, nose and throat	3.6%
Neuro-psychiatric	3.6%
All Immunizations	3.6%
Miscellaneous	11.2%

### 90-plus Age Group.

There were only 3 members in this group, 2 males and 1 female, comprising .02% of the total. The chief complaints were pain in hip, pain in epigastrum and dyspnea. The diagnoses were fracture of the hip, carcinoma of the stomach, and congestive heart failure.

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When the chief complaints of the entire series of patients are considered together, the 24 most frequently listed are as follows:

Chief Complaint	Total	Times	Listed
Routine pre-natal check		114	
Cough		77	
Sore throat		71	
Fever		44	
Chest pain		36	
Backache		28	
Headache		27	
Earache		25	
Dyspnea		25	
Abdominal		23	
Routine blood pressure check		22	
Routine physical examination, no complair	nt	21	
Epigastric pain		20	
Diarrhea		20	
Fatigue		20	
Skin rash		18	
Dizziness		18	
Vomiting		16	
Right upper quadrant pain		15	
Joint pain		15	

For the entire group of patients, 1,416 in all, there was a total of 1,429 diagnoses. The approximate percentage of patients falling into each diagnostic category is shown below:

CATEGORY NU	MBER OF PATIENTS	PERCENT
EENT	205	14.3
Respiratory	180	12.9
Trauma	135	9.4
Pregnancy	129	9.0
Cardiovascular	128	8.9
Gastro-intestinal	125	8.7
Neuro-psychiatric	61	4.3
Musculoskeletal	58	4.0
Dermatology	54	3.7
Genito-urinary	54	3.7
Miscellaneous	54	3.7
Routine Physical Examination	52	3.6

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(cont. over)

CATEGORY	NUMBER OF PATIENTS	PERCENT
Gynecology	47	3.3
Immunizations	46	3.2
Endocrine	40	2.8
Neoplasm	24	1.6
Hematology	21	1.4
Infectious diseases	16	1.1
TOTALS	1,429	100.0 %

Numerous other studies closely parallel the diagnostic distribution as shown above. (1, 11, 12, 13, 14, 15) The various diagnostic categories and the percentage of patients of each group falling into these categories is shown below: CARDIOVASCULAR



AGE GROUP



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AGE GROUP

21-30 31-40 41-50 51-60 61-70 71-80 81-90

4

2

0

0-10 11-20





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AGE GROUP

TRAUMA



#### GENERAL INFORMATION

In order to determine the type of practice in which the general practitioners were engaged, the hospital facilities available to them, the time devoted to their practice, the number of patients seen in an average day, and the number of house calls made in an average week, the physicians were questioned regarding these matters. They were asked the following questions:

1. Are you in group, partnership, or solo practice?

Of the 52 physicians reporting, the largest number, 24 (46.2%) were practicing in a partnership. Of the remaining, 18 (34.6%) were in solo practice, 9 (17.3%) in a group, and 1 (1.9%) the salaried employee of another physician. It seems noteworthy that 65.4% of the reporting physicians practice with one or more other physicians. This appears to be consistent with a general trend towards groups and partnerships. It is predicted that by 1966, 75% of physicians will practice in groups or partnerships. (16)

2. Is there a hospital in your community? If not, how far to the hospital where your patients are confined?

In response to this question, 47 (91%) indicated the presence of a local hospital, 5 (9%) stated that there was none. The distance from the hospital ranged from 6 to 25 miles. Of those reporting no hospital, 4 were in solo practice, the other in a partnership. In general, these physicians see a few more patients a day than their colleagues, ranging from 20 to 50 per day and averaging 37, as compared with an overall average of 31.84. They also make more

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house calls per week, ranging from 5 to 20 with an average of 11.4 calls as compared with the overall average of 8.52. The physician reporting 20 house calls per week was 25 miles from the hospital.

In Peterson's analysis, 90% of the physicians were within 6 miles of a hospital, almost identical to this study. (13) 3. Approximately how much time do you take off each year?

This varied from none to six weeks. The 49 responses are as follows:

T I ME	SOLO	GROUP	PART.	SALARIED	TOTAL	PERCENT
30-plus days	4	2	8	0	14	28.6
21-29 days	5	4	5	0	14	28.6
14-20 days	4	3	6	1	14	28.6
0-13 days	4	0	3	0	7	14.3

The type of practice appears to have some bearing on the time off taken by the physician. Those in partnerships averaged 22.2 days off per year, those in groups 21.6 days per year, solo practitioners 19 days per year, and the one salaried physician 14 days. The overall average for the 49 reporting was 20.4 days per year. This of course is exclusive of the days routinely taken off each week.

4. Do you have evening or Sunday office hours?

Of 52 responses to this question, 12 (23%) maintained Sunday or evening office hours. Of the 12, 6 indicated that they were open for short periods of time on Sunday morning, 1 on Tuesday evening,

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1 on Saturday evening, and the remaining 4 did not specify the time. Several others indicated that they were sometimes open in special circumstances, but not routinely.

5. Approximately how many patients do you see a day?

The number of patients seen per day by individual physicians varies greatly in this study, the lowest number reported was 15 per day, the highest was 60. In a few cases the average number was reported in a range; where this was done the difference in the range was divided and the quotient added to the lesser number in the range. The number of patients seen was put into categories according to the type of practice. In solo practice, 18 physicians reported, the lowest number reported was 16, the highest was 60. The average number of patients per day seen by this group was 33.53, the highest of any group. In group practice the lowest number reported was 24 patients per day, the highest 40, with an average of 30.20. This was the lowest of the major groups. The lowest number reported from a physician in partnership was 15, the highest 55, with an average of 31.52 patients per day. The one salaried physician reported 22 patients per day. For the entire group, 50 in all, the average was 31.84 patients per day. This agrees with a survey by the American Academy of General Practice in which it was reported that members averaged 32 patients a day. (17) In the Peterson study, the average was 26 patients a day. (13)

The distribution was as follows:

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As is shown above, the majority (68%) of the physicians fall into the categories seeing from 21 to 40 patients per day with sharp declines both above and below this.

It can also be seen that 3 (6%) saw 15 or less patients per day; 5 (10%) saw from 16 to 20; 10 (20%) saw 21 to 25; 10 (20%) saw 26 to 30; 5 (10%) saw 31 to 35; 10 (20%) saw 36 to 40; 1 (2%) saw 41 to 45; 2 (4%) saw 45 to 50; 1 (2%) saw 51 to 55; and 3 (6%) saw 55 to 60.

6. Approximately how many house calls do you make a week?

Of those answering this question, the highest number reported was 21, by a solo practitioner, the lowest was 2, by a physician in group practice. Some of these answers were reported in a range; this was handled as previously discussed under office patients.

With the exception of the group of physicians previously mentioned that practice without a hospital in the community, there appears to be little correlation between the type of practice and the number of house calls made. For those in solo practice, the average number was 8.28 per week, for those in group practice 9.44 per week, and for those in partnerships 8.71 per week. The average for the entire group was 8.52 per week.

### SURGERY

In an effort to ascertain what surgical procedures are commonly performed in general practice the physicians were polled in this area. It was assumed that minor procedures were routinely performed and for that reason these were omitted. The operations listed were for the most part in the realm of major surgery. To obtain this information a series of operations was listed with the request to indicate if these were performed routinely, seldom, or never.

Of the 52 physicians responding to the questionnaire, one indicated that he did no surgery at all but assisted on all procedures on his patients. Two others indicated that they did very little surgery, but administered the anesthesia for their surgical patients. Thus 3 of the 52 actually do little or no surgery, but are included in the tabulations. The operations listed and the results were as follows:

OPERATION	ROUTINELY	SELDOM	NEVER
Appendectomy Cholecystectomy Herniorrhaphy Hemorrhoidectomy	40 (77%) 25 (48%) 35 (67.3%) 37 (71.2%)	6 (11.5%) 7 (13.5%) 9 (17.3%) 6 (11.5%)	6 (11.5%) 20 (38.5%) 8 (15.4%) 9 (17.3%)
and ligation Cesarean section Dilatation and	23 (44.3%) 31 (59.6%)	12 (23%) 13 (25%)	17 (32.7%) 8 (15.4%)
curettage Hysterectomy Tubal ligation Mastectomy Prostatectomy TUR T & A	50 (96.2%) 28 (53.8%) 32 (61.5%) 21 (40.4%) 3 (5.8%) 3 (5.8%) 45 (86.5%)	1 (1.9%) 6 (11.5%) 8 (15.4%) 9 (17.3%) 3 (5.8%) 0 1 (1.9%)	1 (1.9%) 18 (34.7%) 12 (23%) 22 (42.3%) 46 (88.5%) 49 (94.2%) 6 (11.5%)
Internal fixation of fractures	15 (28.8%)	9 (17.3%)	28 (53.8%)

Others voluntarily listed included: gastric resection (2), bowel resection (2), vasectomy (3), and one each of cystoscopy, amputations, and thoracentesis.

The operations in order of frequency of performance as follows: OPERATION PERCENT WHO PERFORM Dilatation and curettage 98% T & A 88.5% Herniorrhaphy 84.6% Hemorrhoidectomy 82.7%

nermennepny	0-+.0/0
Hemorrhoidectomy	82.7%
Appendectomy	81.5%
Tubal ligation	77%
Cesarean section	75%
Venous stripping and ligation	67.3%
Hysterectomy	65.5%
Cholecystectomy	61.6%
Mastectomy	57.7%
Internal fixation of fractures	46.1%
Prostatectomy	11.5%
TUR	5.8%

As the above seems to indicate, these physicians perform a major part of their own surgery. The percentage is surprising in view of a recent survey of members of the American Academy of General Practice in which this question was asked: Should the general practitioner do major surgery? The replies were, Yes - 50%, No - 42%, and Undecided - 8%. (18) A similar study reporting on the extent of practice of general practitioners graduating in 1945 or later indicated that in the midwestern area only 32% were doing major surgery. (19) This seems to indicate that several Nebraska general practitioners are performing more surgery than many of their colleagues.

# OBSTETRICS

Since a large part of a general practice consists of obstetrics, I was interested in knowing what complications of pregnancy and labor are frequently encountered, the analgesia and anesthetics most commonly used, and the approximate number of deliveries that the physicians attended in a given period of time. To obtain this information the following questions were asked:

1. In your practice, what are the most frequent complications of pregnancy?

In response to this question many physicians listed more than one complication. For this reason the number of complications listed exceeds the total number of physicians reporting. The complications most frequently reported were as follows: mild toxemia (20), excessive weight gain (19), spontaneous abortion (15), anemia (6), nausea and vomiting (4), urinary tract infection (3), premature labor (2), bleeding last trimester (2), varicose veins (2), hypertension (1), vaginitis (1), premature separation of the placenta (1), threatened abortion (1), and hemorrhoids (1).

2. What are the most frequent complications of labor in your practice?

As in the above case, many physicians listed more than one complication. These are listed in order of descending frequency as follows: occiput posterior presentation (19), post-partum hemorrhage (11), breech presentation (6), uterine inertia (6), malposition (4), placenta previa (4), cephalo-pelvic disproportion (3), transverse arrest (2), retained placenta (2), and false labor (1).

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3. What analgesic agents do you prefer to use during labor?

The response to this question indicates that only a few drugs are commonly employed but that they are used in a great number of combinations. Those drugs listed were Phenergan, Demerol (Merperdine hydrochloride), Trilene (trichlorethylene), Nembutal (Pentobarbital sodium), Scopolamine, Mepergan (Promethiazine hydrochloride and Meperdine hydrochloride), Leritine (anileridine), Thorazine (Chlorpromazine), Sparine (Phenothiazine hydrochloride), seconal (secobarbital sodium), Atropine, and Nitrous oxide. The combinations and individual drugs as employed by the physicians are listed below in decreasing order of frequency.

Phenergan and Demerol	21
Demerol	7
Trilene	4
Phenergan, Demerol and Scopolamine	3
Scopolamine and Demerol	3
Phenergan, Demerol and Trilene	2
Mepergan	2
Nembutal, Phenergan, Demerol and Trilene	1
Demerol and Trilene	1
Phenergan and Leritine	1
Demerol, Barbiturates and Nitrous oxide	1
Trilene and occasional hypnosis	1
Thorazine, Seconal and Demerol	1
Sparine and Demerol	1
Demerol, Phenergan and Atropine	1
Demerol and a barbiturate	1
	51

It is interesting to note that of 51 physicians responding to this question, 43 (84%) employ Demerol either alone or in combination with other drugs; 29 (57%) employ Phenergan either alone or in combination; and 9 (14%) employ Trilene alone or in combination. 4. What types of anesthesia do you prefer for deliveries?

There were 51 responses to this question, which are indicated below in order of decreasing frequency.

Trimar or Trilene (trichlorethylene)	14
Pudendal block and Trimar	5
Ether	4
Trimar or saddle block	4
Saddle block	3
Nitrous oxide	2
Pudendal block	2
Nitrous oxide or ether	2
Trimar or ether	2
General anesthesia (agent unspecified)	2
Nitrous oxide and cyclopropane	2
Saddle block and Trimar	2
Cyclopropane and oxygen	2
Trilene or hypnosis	1
Pudendal, saddle block or gas	1
Cyclopropane or saddle block	1
Trimar or cyclopropane	1
Ether or saddle block	1
	51

This shows that 29 of the 51 physicians (57%) employ Trimar or Trilene (Trichlorethylene) alone or with other agents; 12 (23%) use saddle blocks alone or in combination; 9 (17%) use ether alone or in combination; 8 (16%) use pudendal blocks alone or in combination; 6 (12%) use nitrous oxide alone or in combination; and 6 (12%) use Cyclopropane alone or in combination with other agents.

5. Approximately how many babies do you deliver a month?

This question received 50 replies. The responses ranged from an average of 15 per month down to an average of 2 per month. The overall average was 6.54 deliveries a month.

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# MEDICINE

In the field of general medicine two of the most important diagnostic tools presently available are electrocardiography and roentgenology. The value of these, however, is directly related to accurate interpretation. For this reason I was interested in knowing if the physicians in question felt sufficiently trained in these fields to undertake the interpretation of electrocardiograms and roentgenographs made in their offices. Accordingly, the following guestions were asked:

1. Do you routinely read your own electrocardiograms?

Of the 52 physicians responding to this question, 21 (40.4%) reported that they did, 27 (51.9%) indicated that they did not, and 4 (7.7%) stated that they read some of them. Several who indicated that they read their own cardiograms indicated that these were also sent to a cardiologist for further study.

2. Do you usually read your own x-rays?

Of the 52 reporting physicians, 45 (86.5%) answered yes, 4 (7.7%) answered no, and 3 (5.8%) answered that they read some of their own x-rays.

This represents a marked contrast from the proportion of physicians reading their own electrocardiograms, Less than one-half read their own electrocardiograms, whereas 86.5% read their x-rays. Part of this difference is probably inherent in the nature of these two diagnostic tools. The electrocardiogram is used less frequently

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in most offices and for accurate interpretation the recognition of subtle changes from so-called normal is required. While x-rays fall often into the same category, many others readily show obvious abnormality, and are often taken in the first place to corroborate a clinical impression, to check on the patient's progress, or to be used as a visual aid in the reduction of fractures, etc.

Another frequently discussed aspect of medicine at the present time is psychosomatic disorders and functional illness. It is probable that there are few fields of medicine where the patient with a functional complaint is not seen, but it is doubtful if anyone, other than the psychiatrist, sees as many of these individuals as does the general practitioner. For this reason it was felt that he would be in the best position to estimate what percentage of patients suffer from psychosomatic disorders. Accordingly, this question was asked.

3. What percentage of your patients, in your estimation, suffer from psychosomatic illness?

The answers ranged from 1 to 2% up to 90%, the average being 35.2%. The wide variation of estimates probably reflects a number of things. The first is the attitude of the physician towards psychiatry, his interest or disinterest, his knowledge of psychiatric illness, and finally it may reflect the thoroughness of his clinical investigation. It was interesting to note that in general those who reported the highest percentage of psychosomatic illness were the same physicians who expressed an interest in postgraduate courses in psychiatry.

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Roth states that a cliche generally believed in medical circles is that the percentage varies from 30 to 60%. In an effort to disprove this, he studied over 500 patients with the assistance of a psychiatrist. On the basis of their study, he suggests that the incidence of psychosomatic illness seen in a general practice is actually between 10 and 15%. (20)

# PUBLIC HEALTH

Although the daily practice entails much that can be classified in the realm of public health, I was interested if the physicians in this study actively participated in community, school, or other planned health programs, and if so what these programs were. To obtain this information the following questions were asked with the results as shown.

 Do you hold any official office in county, city, or regional health boards? If so, please describe.

Of the 49 physicians who answered this question, 32 (67.3%) indicated that they did hold such an office, 17 (32.7%) do not. Many of those holding office hold more than one; the following represent the number of times each office was mentioned.

City physician	21
County health official	11
County mental health board	2
Selective Service medical advisor	2
Officer or committee member of Nebraska	
Medical Association	3
Officer of State Board of Health	1
Officer of Regional Medical District	1
Civil Defense	1
County Cancer Society	1
Yes - unspecified	1

2. Do you participate in school health programs? Please describe. Of the 49 respondents to this question, 45 (91.8%) indicated that they had some function in school health programs, 5 (8.2%) indicated that they did not.

Some physicians were engaged in more than one program concerning school health. Therefore, the following respresents the number of times each activity was mentioned.

Annual or pre-school physical examination of	students22
Athletic team physician or athletic physical	examinations-19
Immunization programs	12
Mantoux testing of students	4
School physician	4
School physician for college	2
Lectures to high school students	1
Parochial school physician	1
Yes - unspecified	4

# MEDICAL EDUCATION

In order to discover how these practicing physicians viewed certain elements of their medical education in retrospect, they were polled in this area, realizing well that the medical curriculum is altered from time to time and that emphasis shifts with advances in medical knowledge. In an effort to determine how well the physicians felt that their medical education had prepared them for general practice in a rural community, they were asked to complete a form listing most of the major courses of the curriculum and to indicate their opinion as to the adequacy, inadequacy, or proper emphasis of these courses. The results are shown below.

### BASIC SCIENCES

SUBJECT	T00 L	ITTLE	EMPHASIS	S TOO M	UCH	EMPHASIS	PR	OPER
Anatomy	5	5 (10%)		2	(4%)		43	(86%)
Biochemistry	1	(2%)		14	(28%	5)	35	(70%)
Bacteriology	3	3 (5.7%	5)	4	(7.5	%)	46	(86.8%)
Clinical Patholog	y 13	3 (26%)		4	(8%)		33	(66%)
Pathology (gen'l.	) 5	5 (10%)		5	(10%	5)	40	(80%)
Pharmacology	2	2 (3.9%	(,)	7	(13.	7%)	42	(82.4%)
Physiology	3	3 (6%)		3	(6%)		44	(88%)
Preventive Med.	2	2 (4%)		3	(6%)		45	(90%)

This seems to indicate that in the vast majority of cases the physicians felt that the basic sciences were properly emphasized. The only exceptions are biochemistry, which a fourth of the physicians questioned felt was over emphasized, and clinical pathology, which approximately one-fourth thought was under emphasized.

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# CLINICAL COURSES

SUBJECT	T00 L	ITTLE	EMPHAS	IS T <b>O</b> O	MUCH	EMPHASIS	PR	OPER
Apesthesiology	3	1 (62	2/1	C			10	(28%)
Aneschestorogy	ر د	1 (02	/o]				10	(20%)
Dermatology	د	4 (00	<i>(</i> <b>)</b>	L L			10	(32%)
Electrocardiology	/ 3	2 (64)	%)	1	(2%)		17	(34%)
Hematology	1	2 (24)	%)	3	(6%)		35	(70%)
Gynecology	1	1 (22)	%)	C	)		39	(78%)
Neurology	1	5 <b>(</b> 30'	%)	1	(2%)	)	34	(68%)
Obstetrics		8 (16)	%)	C	)		42	(84%)
Pediatrics		9 (18'	%)	C			41	(82%)
Psychiatry	2	6 (52)	%)	2	2 (4%)		22	(44%)
Rehabilitation	2	9 <b>(</b> 58'	%)	C	)		21	(42%)
Orthopedics	2	6 (52)	%)	C	)		24	(48%)
Otorhinolaryng.	2	5 <b>(52</b> °	%)	1	(2%)		24	(48%)
Radiology	2	7 (54	%)	C	)		23	(46%)
Surgery	1	4 <b>(</b> 28'	%)	2	2 (4%)		34	(68%)
Urology	1	2 (24	%)	1	(2%)		37	(72%)

It is noteworthy that in clinical areas there are few who feel that anything is over emphasized, and many subjects are thought to be under emphasized. This seems to reflect an attitude that as a physician one is seldom as well informed in any area as he would like to be. Those subjects thought to be under emphasized are shown in descending frequency.

68%
64%
62%
58%
54%
52%
5 <b>2</b> %
50%
30%
28%
24%
<b>2</b> 4%
22%
18%
16%

Peterson's study closely parallels this, psychiatry, electrocardiography, dermatology and obstetrics being the most under emphasized courses. Biochemistry was frequently mentioned as being a subject unnecessary for general practice. (13)

To further explore the physicians' feelings on medical education, they were asked this question.

2. What alterations in the curriculum would you suggest?

Many did not answer this question but the responses of those who did were extremely variable. The responses are shown below.

Less basic sciences and more clinical training	8
Medical economics, accounting, records and business courses.	7
More correlation of basic science and clinical material	5
More emphasis on modern drugs and current therapy	4
Increased emphasis on medical ethics	2
Increased preceptorship training	2
Increased public health training	2
Courses in how to start a practice	1
Courses on doctor-patient relationships	1
More on the history of medicine	1
Less science and more arts in pre-med	1
Emphasize the personal appearance of physicians	1
More on acute disease, less chronic	1
Increase minor surgery training	1
Preceptorship in the office of specialists	1
General practitioners in clinics and wards to offset the	
top-heavy influence of specialists	1
Courses in dressing and cast application	1

One readily notes that there is little agreement among the physicians here except in a few areas; these are indicated at the top of the list.

To determine the fields in which the physicians felt they would benefit from further training, they were asked this question: 3. If it were possible to hold postgraduate courses in your area, what courses would you be interested in attending?

Some physicians listed several courses, thus the courses are listed according to the number of times they appeared.

Obstetrics and/or Gynecology	19
Orthopedics	15
General Surgery	14
Pediatrics	12
General Medicine	10
Psychiatry	6
Dermatology	6
Anesthesiology	4
Radiology	3
Cardiology	3
Geriatrics	2
Practical Therapeutics	2
Otorhinolaryngology	2
Rehabilitation and Physical Therapy	1
Refractions	1
Traumatic Surgery	1
Any phase of medicine applicable	
to general practice	2

An interesting aspect brought up here is that although 19 physicians are interested in courses in obstetrics and gynecology, only 8% thought there was too little emphasis on obstetrics, and 22% on gynecology in medical school. Similarly general surgery is mentioned 14 times, but only 28% thought this under emphasized in medical school. Pediatrics is mentioned 12 times; 9% thought this under emphasized in medical school.

#### SUMMARY

In an effort to study general practice in the smaller cities and rural areas of Nebraska, one-hundred questionnaires were mailed to physicians engaged in general practice in all areas of the state. Over fifty percent of these were completed and returned. The physicians were quizzed on the age, sex, chief complaint and working diagnosis of thirty consecutive office patients, type of practice, number of patients seen per day, number of house calls per week, type of surgery performed, obstetrical complications, number of deliveries per month, obstetrical analgesia and anesthesia, electrocardiography, roentgenography, participation in public health programs, school health programs, undergraduate and postgraduate medical education.

A series of over 1,400 patients was obtained; there was a preponderance of females (54%), and nearly one-half of all patients were under 31 years of age. Approximately one-fourth of all patients entering the office had a respiratory or EENT complaint, approximately one-tenth entered with a traumatic injury, one-twelfth entered for delivery or pre-natal care, one-twelfth for cardiovascular disease, one of thirteen for gastro-intestinal disorders, and one of twenty-two for a neuro-psychiatric problem.

Approximately two-thirds of the physicians reporting practice with one or more other physicians. Over ninety percent have local hospital facilities; none of the physicians were more than twentyfive miles from a hospital. The average number of patients seen

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per day in this study was approximately 32. The average number of house calls made per week was slightly over 8.

Almost all of the physicians polled perform major surgery. The procedures most commonly performed are dilatation and curettage, tonsillectomy and adenoidectomy, herniorrhaphy, hemorrhoidectomy, appendectomy, tubal ligation, cesarean section, venous stripping and ligation, hysterectomy, cholecystectomy, and mastectomy. A few perform such procedures as prostatectomies and gastric resections.

The most frequent complications of pregnancy were mild toxemia, spontaneous abortion, nausea and vomiting. The most frequent complications of labor were persistent occiput posterior, post-partum hemorrhage, breech presentations, and uterine inertia. The most commonly used obstetrical analgesics are Meperdine, Phenergan, and trichlorethylene in various combinations. The most commonly used anesthetics are trichlorethylene, pudendal block, ether and saddle block. The average physician in this study delivered approximately 6 or 7 babies each month.

Less than one-half of the physicians reporting read their own electrocardiograms; over 80% read their own x-rays.

An overall estimate of psychosomatic illness ranged from 1 or 2% of all patients to 90%. The average was approximately 35%.

Approximately two-thirds of the physicians polled hold an official county, city, or regional health office. Over 90% are active in various school health programs.

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In the area of medical education there was general agreement that proper emphasis was placed on the basic sciences, with the exception of biochemistry, which one-fourth thought over emphasized, and clinical pathology, which one-fourth thought was under emphasized. There were few who thought that any of the clinical courses was over emphasized. The clinical courses considered to be under emphasized by a majority of the physicians questioned were dermatology, electrocardiography, anesthesiology, rehabilitation, psychiatry, orthopedics, and otorhinolaryngology.

There was a wide variety of suggestions for improving undergraduate training, only a few being mentioned more than one or two times. These were: less basic science and more clinical training, courses in keeping medical records, starting a practice, and office management, current therapy with modern drugs, better correlation of basic science and clinical material.

The postgraduate courses in which the physicians were most interested were: obstetrics-gynecology, orthopedics, surgery, pediatrics, and general medicine.

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### CONCLUSIONS

One definite conclusion that can be reached is that rural general practice is extremely diversified and wide in scope. The general practitioners in this study see a wide variety of illnesses in people of all ages, they are required to manage many traumatic problems, they encounter a variety of surgical cases, attend many deliveries, and have many chronic medical problems with which to cope. It is doubtful that many graduates with only a one-year internship can exercise the skill and judgment in the management of these problems that the patient deserves.

In a recent poll of members of the American Academy of General Practice, 87% of the physicians polled expressed an opinion that one or more years of residency training in general practice programs should be completed before entering practice. (19) On the basis of this study, this recommendation appears to be sound.

Of what this additional training should consist is a debatable question. Some feel that the general practitioner should do only minor surgery and that this phase of his training should be minimized; others feel that the general practice residency should place major emphasis on surgery. The proper relationship probably lies somewhere in between these two extremes, and should be dictated by the individual preference of those entering a general practice residency.

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In general, the physicians felt that there was too little emphasis placed on the majority of the clinical courses in medical school. Since the hours spent in each department are limited by the length of the medical course, it would appear that the only way additional training can be obtained in these areas is by residency training and postgraduate courses. Every effort should be made to provide adequately for this type of training, and to induce physicians to take advantage of the many opportunities for additional training presently available.

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