Manpower Survey

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INTRODUCTION

For several years, reports from various parts of the country have indicated the existence of a manpower shortage in the fields of prosthetics and orthotics. These reports have stemmed primarily from facility owners and physicians endeavoring to provide quality prosthetic and orthotic services for their patients. This paper reports the results of a survey which was conducted for the purpose of shedding some light on the nature and magnitude of this problem and, in turn, contributing to efforts directed toward its solution.

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The survey was proposed and conducted by the Subcommittee on Special Educational Projects in Prosthetics and Orthotics, Committee on Prosthetic-Orthotic Education, whose membership includes representation from the American Orthotic and Prosthetic Association: The American Board for Certification, AOPA; the University Council on Prosthetic-Orthotic Education: the Rehabilitation Services Administration, Social Rehabilitation Service; and the Prosthetic and Sensory Aids Service of the Veterans Administration. The Subcommittee was established in June 1967 to supplement the work of other interested agencies and organizations in developing definitive training and long-term educational programs in the fields of prosthetics and orthotics.

At the first meeting of the Subcommittee the members agreed that, before a program of purposeful activities could be launched, it

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would be necessary to examine various aspects of the manpower situation in prosthetics and orthotics, to include scope and intensity of shortages, profiles of personnel currently working in these fields, salary ranges, and demand for graduates of existing educational programs in prosthetics and orthotics. A manpower survey was therefore proposed.

METHODS

Thirty prosthetists and orthotists participated in a pilot study conducted for the primary purpose of evaluating the effectiveness of an initial survey form as a data collection tool. The pilot study experience led to an extensive revision of the form and the incorporation of explanatory material to serve as a basis for more accurately completing a section on employment of graduates. This material consisted of carefully formulated descriptive profiles of graduates of the various educational and training programs in prosthetics and orthotics.

For the purpose of this study, five personnel categories were defined and appeared in the survey form as follows:

1. A *Prosthetist-Orthotist* is skilled in all facets of fabrication, fitting and alignment of prosthetic and orthotic devices; deals with patient; usually certified in both prosthetics and orthotics or qualified to apply for certification in both.

2. A *Prosthetist* is skilled in all facets of fabrication, fitting and alignment of prosthetic devices; deals with patient; usually certified or qualified to apply for certification.

3. A Prosthetic Technician performs benchwork only; does not fit or align prosthetic devices; serves as support person for the prosthetist.

4. An Orthotist is skilled in all facets of fabrication, fitting and alignment of orthotic devices; deals with patient; usually certified or qualified to apply for certification.

5. An Orthotic Technician performs benchwork only; does not fit or align orthotic devices; serves as support person for orthotist.

The revised survey forms were distributed in early July, 1968, and again to non-respondees about a month later. The last completed forms were returned to the CPOE office January 31, 1969. Data were analyzed according to personnel categories and, geographically, according to the eleven regions designated by the American Orthotic and Prosthetic Association. (Appendix A)

PARTICIPANTS AND SUBJECTS

Representatives of 203 facilities, institutions and military installations completed the survey forms. A total of 1,374 persons, representing seven categories related to prosthetics and orthotics, were entered in the study. (Tables I and II)

Data related to corsetieres and shoe specialists will be considered in a separate study. This report is concerned with the remaining five categories of personnel, totaling 1,163, as shown in Table III. It is interesting to note that, excluding the prosthetist-orthotists, the number reported for the various categories are relatively close. The incidence of females reported is low—one prosthetist, seven prosthetic technicians, three orthotists, and six orthotic technicians.

Among the three groups who qualify for certification, the prosthetist-orthotists show the highest percentage of certifees (74.8%)and the orthotists the lowest (51.9%). (Table IV)

RESULTS

Personnel Needs*

All categories reflect current and future shortages of manpower (Table V and Figure 1). According to the findings in this study, and based on the reported number of currently employed, the groups reflecting the greatest manpower shortage at this time are the orthotic technicians (28.6%) and prosthetic technicians (27%).

In one year from the time of the survey, the estimates identify the same two groups as requiring the highest percentage increase of personnel, with prosthetic technicians requiring a 53.7% increase and orthotic technicians a 50.7% increase.

In five years it is estimated that the need for prosthetic technicians will be more than double (113.3%)the number currently employed, and that the need for orthotic technicians will be almost double (97.7%). Estimates for personnel requirements for the other three groups also indicate the need for substantial personnel increases in five years.

The estimated personnel needs

Personnel Needs by Regions

The pattern of personnel requirements for different categories in the eleven AOPA regions is, for the most part, diffuse and ill-defined. (Tables VI-X) After breaking down the total number of personnel into categories and then into regions, the remaining sample is reduced to a relatively small number. Within the limits of this sample, however, the most urgent regional demands for personnel appear as follows:

Prosthetist-Orthotist (Table VI)

Regions V, VI, and VII reflect the greatest over-all demand for personnel in this category, although Region IV reports a somewhat greater current shortage than Region VII.

Prosthetists (Table VII)

Current personnel requirements for prosthetists appear to be most acute in Regions XI and IV, in that order. In five years, Region IV projects the highest percentage needed increase, followed by Regions V, XI and IX.

Prosthetic Technicians (Table VIII)

Regions I and VIII reflect the greatest current shortage in this category. Region IV reflects the greatest future demand, followed by Regions VIII and V.

Orthotists (Table IX)

Region II reports a significantly greater current shortage than any other region. Regions I and V follow, but at a considerably lower

^{*} Use of the terms "now," "current," etc., in this discussion denotes time of survey rather than time of this report.

level. Region II also reports the largest future demand for orthotists, followed by Regions I and VI.

Orthotic Technicians (Table X)

Regions V, VII and II report the greatest current shortages. Regions XI and V reflect the greatest demand for this category in the fiveyear projection.

RATIOS

It is interesting to note the approximate 1:1 ratios in this study. This is characteristic of the ratio of prosthetist to orthotists currently employed and is further reflected in the projected personnel requirements for these two groups. (The ratio of prosthetist-orthotists to prosthetists is approximately 1:2 at the time of the survey and remains the same for estimated future needs. Similarly, the ratio of prosthetist-orthotists to orthotists to orthotists to orthotists to orthotists to orthotists to prosthetist-orthotists to prosthetist.

Of greater significance and interest at this time is the ratio of prosthetists to prosthetic technicians and orthotists to orthotic technicians (Tables XI and XII). Here again, an approximate 1:1 ratio is characteristic of the numbers currently employed. Estimates for future needs show some weighting toward the technicians' side, but do not approach the 1:3 or 4 ratio that is sometimes quoted as desirable.

Upon further examination, it appears that these ratios are reversed in some geographical locations, especially in the western regions. In Region X the prosthetist: prosthetictechnician ratio shows a marked weighting toward the prosthetist' side. This is not found in the orthotist: orthotic technician analysis in this region. The reason for the reversal perhaps may be attributed to the inclusion in this area of a large research laboratory where prosthetic technicians are not employed.

YEARS IN THE FIELD

Slightly over half (53.8%) of the prosthetist-orthotists reported in this study have 10-29 years' experience in their field. The group with 0-9 years' experience is only twothirds as large as the group with 10-19 years' experience, and less than half as large as the group with 20-29 years' experience. (Figure 2)

Sixty-five percent of the prosthetists and 68% of the orthotists in this study have 10-29 years' experience. In both groups, the number of personnel with 10-19 years' experience approximates the number with 20-29 years' experience. These last two groups are approximately onethird larger than the group with 0-9 years' experience.

Conversely, the number of prosthetic technicians and orthotic technicians with 0-9 years' experience constitutes well over half the total number of technicians in their respective groups. (Figure 3) A sharp drop appears in the groups having more than 0-4 years' experience. (It is possible that further investigation would reveal this drop coming even earlier.) The number of years in the field for orthotic technicians showed the same type of distribution as that for prosthetic technicians.

EDUCATIONAL LEVEL

The educational levels of various groups are shown in Table XII. Ex-

cluded in this computation are those persons whose "highest level" was indicated as "intern," "certificate," and "other." Since these often referred to courses which were taken in foreign countries, or were not clearly identifiable, it was decided to include only those levels that indicated completion of recognized school levels and degree courses.

RECOMMENDATIONS FOR EDUCATION

The recommended levels of education are reflected in Table XIV and are much higher than current levels.

SALARIES BY EDUCATIONAL LEVEL

In attempting to correlate salaries with educational level, it is difficult to see a consistent pattern, except that in certain areas a higher educational level appears to conform with higher salaries. For example, in four of the five groups of personnel, there was a higher incidence of above-high-school-level personnel with higher salaries than the median salary for their specific group. This is shown in Table XV.

PROFILE

Table XVI is a composite of the various groups showing median age, median salary, years in field and average education.

DEMAND FOR GRADUATES OF DEGREE COURSES

The final section of the survey form represented an effort to find out how many graduates of the various prosthetic-orthotic educational programs would be employed and the level of salary they might expect.

The number of graduates whom facility owners proposed to employ was unrealistic in that it exceeded the number required as stated in Section I of the survey form. Some respondees explained that they did not have a choice of one graduate over perhaps two or three others, and therefore entered all possibilities. As a consequence, the figures have been distorted in terms of actual need.

The proposed salaries show an extremely wide range, but for the most part, reflect a gradual increase commensurate with an ascending level of education. (Table XVII)

DISCUSSION

The magnitude of the manpower shortage in the fields of prosthetics and orthotics, although undoubtedly more acute in some localities. is. generally speaking, comparable to that in other health fields. The situation has spurred intensive efforts on the part of the various health fields to recruit young qualified individuals to their particular field. Perhaps the manpower needs as projected in this study will underscore the necessity of much greater recruiting efforts on the part of those in the fields of prosthetics and orthotics.

Results of data analysis pose several questions. For example, what implications may be drawn from the projected prosthetist-prosthetic technician ratio of approximately 1:1? And the same ratio for orthotist-orthotic technicians? This finding is in contradiction to the well-circulated belief that there should be three or four technicians for every professional person. Does this imply that the industry feels a greater urgency for more professional people than for technicians? Does it point to a comparatively lesser need for technical personnel, perhaps because of an anticipated increase in the use of prefabricated components? Or is it an expression of status quo, inasmuch as the 1:1 ratio is characteristic of the current ratio of prosthetists to prosthetic technicians and orthotists to orthotic technicians?

What is the reason for the short time that technicians remain in the field as reflected in the relatively small size of those groups with more than four years' experience? How much of this may be attributed to upward movement of personnel to the professional level? How will the trend toward higher standards of education affect this group? Is it realistic to try to keep these technicians for a longer period of time? If so, how might this be accomplished?

These are the kinds of questions which, if answered, might provide a clearer perspective in trying to develop long-range plans for educational and clinical programs in the prosthetic-orthotic field.

SUMMARY

Two hundred and one survey forms were completed on 1,374 personnel in the fields of prosthetics and orthotics. Reported here are data related to 1,163 persons currently employed in five categories: prosthetics-orthotics, prosthetics, orthotics, prosthetic technicians and orthotic technicians. Current manpower shortages and estimated future manpower needs are also reported.

Members who have served on the Subcommittee on Special Educational Projects in Prosthetics and Orthotics, CPOE, are:

Dr. J. Warren Perry, Chairman Dr. Jack D. Armold Mr. William M. Bernstock Dr. Sidney Fishman Mr. McCarthy Hanger Dr. Alfred E. Kritter Mr. George H. Lambert Mrs. Florence Knowles Mr. Alvin Muilenburg Dr. Herbert E. Pedersen, ex officio Mr. Herbert Warburton

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TABLE I PROSTHETIST-ORTHOTIST MANPOWER SURVEY

Survey forms sent out							 						410	
Survey forms returned							 						201	(49.0%)
Personnel entered in study .				 •			 				•	•	1,374	

TABLE II

PERSONNEL ENTERED IN STUDY BY CATEGORY

	NUMBER	% OF TOTAL (1374)
Prosthetist-Orthotists	119	8.7
Prosthetists	271	19.7
Prosthetic Technicians	258	18.8
Orthotists	266	19.4
Orthotic Technicians	249	18.1
Corsetieres	149	10.8
Shoe Specialists	62	4.5
TOTAL	1,374	

TABLE III PERSONNEL ENTERED IN STUDY (Excluding Corsetieres and Shoe Specialists)

	NUMBER	% OF TOTAL (1,163)
Prosthetist- Orthotists	119	10.2
Prosthetists	271	23.3
Prosthetic Technicians	258	22.2
Orthotists	266	22.9
Orthotic Technicians	249	21.4
TOTAL	1,163	

TABLE IV NUMBER OF CERTIFEES ENTERED IN STUDY

	TOTAL NUMBER IN STUDY CERTINUMBER 119 89 271 171 266 138	IFEES	
Prosthetist-Orthotists Prosthetists Orthotists	IN STUDY	NUMBER	PERCENT
Prosthetist-Orthotists	119	89	74.8
Prosthetists	271	171	63.1
Orthotists	266	138	51.9

			CATE	GORIE	S	
	Pros. Orth.	Pros.	Pros. Tech.	Orth.	Orth. Tech.	TOTAL
CURRENTLY EMPLOYED	125	262	270	27 1	266	1, <mark>194</mark>
NEEDED NOW	154	310	343	320	342	1,469
Increase in Number	29	48	73	49	76	275
*Percentage increase	23.2	18.3	27.0	18.1	28.6	23.0
NEEDED IN ONE YEAR	186	354	415	384	401	1,740
Increase in number	61	92	145	113	135	546
Percentage increase	48.8	35.1	53.7	41.7	50.7	45.7
NEEDED IN FIVE YEARS	236	460	576	442	526	2,240
Increase in number	111	198	306	171	260	1,046
Percentage increase	88.8	75.6	113.3	63.0	97.7	87.6

TABLE V ESTIMATED PERSONNEL NEEDS

*Percentage increases based on number currently employed in category.

TABLE VI ESTIMATED PERSONNEL NEEDS BY REGION

PROSTHETIST-ORTHOTISTS

						REG	IONS					
		1	111	IV	v	VI	VII	VIII	IX	x	XI	TOTAL
CURRENTLY EMPLOYED	6	14	15	17	3	13	8	9	12	16	12	125
ESTIMATED PERSONNEL NEEDS												
Needed now	6	18	17	23	6	19	10	11	14	17	13	154
Increase in No.	0	4	2	6	3	6	2	2	2	1	1	29
*Percentage Inc.		28.6	13.3	35.3	100.0	46.1	25.0	22.2	16.7	6.2	8.3	23.2
Needed in 1 year	7	20	20	27	8	24	13	13	18	20	16	186
Increase in No.	1	6	5	10	5	11	5	4	6	4	4	61
Percentage Inc.	16.7	42.8	33.3	58.8	166.6	84.6	62.5	44.4	50.0	25.0	33.3	48.8
Needed in 5 years	8	26	24	32	12	32	18	16	22	25	21	236
Increase in No.	2	12	9	15	9	19	10	7	10	9	9	111
Percentage Inc.	33.3	85.7	60.0	88.2	300.0	146.1	125.0	77.7	83.3	56.2	75.0	88.8

TABLE VII ESTIMATED PERSONNEL NEEDS BY REGION

PROSTHETISTS

						REGI	ONS					
	_	11	111	IV	v	VI	VII	VIII	IX	X	XI	TOTAL
EMPLOYED	15	30	45	30	23	36	22	23	11	22	5	262
NEEDS												
W	16	35	48	42	28	41	27	27	14	24	8	310
ease in No.	1	5	3	12	5	5	5	4	3	2	3	48
centage Inc.	6.7	16.7	6.7	40.0	21.7	13.9	22.7	17.4	27.3	9.1	60.0	18.3
1 year	17	40	52	49	33	46	32	35	18	24	8	354
ase in No.	2	10	7	19	10	10	10	12	7	2	3	92
entage Inc.	13.3	33.3	15.5	63.3	43.5	27.8	45.4	52.2	63.6	9.1	60.0	35.1
5 years	22	48	60	77	54	55	39	44	24	26	11	460
ase in No.	7	18	15	47	31	19	17	21	13	4	6	198
entage Inc.	46.7	60.0	33.3	156.7	134.8	52.8	77.3	91.3	118.2	18.2	120.0	75.6

CURRENTLY

ESTIMATED PERSONNEL I

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Needed in

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TABLE VIII ESTIMATED PERSONNEL NEEDS BY REGION

PROSTHETIC TECHNICIANS

						REG	IONS					
	1	11	111	IV	V	VI	VII	VIII	IX	X	XI	TOTAL
RRENTLY EMPLOYED	13	30	51	42	29	41	26	17	8	4	9	270
TIMATED RSONNEL NEEDS												
Needed now	19	38	62	56	36	50	33	24	10	4	11	343
Increase in No.	6	8	11	14	7	9	7	7	2	0	2	73
*Percentage Inc.	46.1	26.7	21.6	33.3	24.1	21.9	26.9	41.2	25.0	-	22.2	27.0
Needed in 1 year	22	47	71	76	43	56	39	30	12	5	14	415
Increase in No.	9	17	20	34	14	15	13	13	4	1	5	145
Percentage Inc.	69.2	56.7	39.2	80.9	48.3	36.6	50.0	76.5	50.0	25.0	55.5	53.7
Needed in 5 years	28	63	88	119	66	76	52	43	17	6	18	576
Increase in No.	15	33	37	77	37	35	26	26	9	2	9	306
Percentage Inc.	115.4	110.0	72.5	183.3	127.6	85.4	100.0	152.9	112.5	50.0	100.0	113.3

CURRENT

ESTIMATE PERSONNI

Pe	rcenta	ge Inc.
Needed	in 5 ye	ars
In	crease	in No.
Р	ercenta	ge Inc

TABLE IX ESTIMATED PERSONNEL NEEDS BY REGION

ORTHOTISTS

						REGI	ONS					
		Ш	ш	IV	v	VI	VII	VIII	IX	×	XI	TOTAL
EMPLOYED	9	17	24	57	24	19	26	34	28	21	12	271
NEEDS												
ow	12	31	28	62	31	23	30	37	30	23	13	320
ease in No.	3	14	4	5	7	4	4	3	2	2	1	49
rcentage Inc.	33.3	82.3	16.6	8.8	29.2	21.0	15.3	8.8	7.1	9.5	8.3	18.1
n 1 year	13	35	35	77	34	25	36	42	39	28	15	379
ease in No.	4	18	11	20	10	6	10	8	11	7	3	108
centage Inc.	44.4	105.9	45.8	35.1	41.7	31.6	38.5	38.2	39.3	33.3	25.0	<mark>39.8</mark>
n 5 years	19	38	38	93	36	35	39	50	45	30	19	442
ease in No.	10	21	14	36	12	16	13	16	17	9	7	171
centage Inc.	111.1	123.5	58.3	52.6	50.0	84.2	50.0	47.0	60.7	42.8	58.3	63.0

CURRENTLY

ESTIMATED PERSONNEL

Needed no

Incr

*Pe

Needed i

Incr

Perc

Needed in Incr

Percentage Inc.

TABLE X ESTIMATED PERSONNEL NEEDS BY REGION

ORTHOTIC TECHNICIANS

					REGI	ONS					
	Ш	ш	IV	v	VI	VII	VIII	IX	x	XI	TOTAL
27	19	33	63	26	23	16	19	17	16	7	266
-		-					-	-			

CURRENTLY EMPLOYED

ESTIMATED PERSONNEL NEEDS

	-											
Needed now	30	26	43	80	39 13	29	22	24	20	21	8	342
*Percentage Inc.	11.1	36.8	30.3	27.0	50.0	26.1	37.5	26.3	17.6	31.2	14.3	28.6
Needed in 1 year	30	32	47	96	45	34	29	30	24	20	14	401
Increase in No.	3	13	14	33	19	11	13	11	7	4	7	135
Percentage Inc.	11.1	68.4	42.4	52.4	73.1	47.8	81.2	57.9	41.2	25.0	100.0	50.7
Needed in 5 years	35	37	60	113	77	49	38	41	35	20	21	526
Increase in No.	8	18	27	50	51	26	22	22	18	4	14	260
Percentage Inc.	29.6	94.7	81.8	79.4	196.1	113.0	137.5	115.8	105.9	25.0	200.0	97.7

	LEVELS						8.4. 5
CATEGORY	M.A.	B.S. or B.A.	A. A.	HIGH SCHOOL	SOME COLLEGE	LESS THAN HIGH SCHOOL	TOTAL
ProsOrth.	1 (1.2%)	10 (11.6%)	1 (1.2%)	49 (57.0%)	20 (23.2%)	5 (5.8%)	86
Pros.	2 (1.0%)	20 (8.8%)	6 (2.7%)	154 (68.1%)	20 (8.8%)	24 (10.6%)	226
Orth.	0	12 (5.6%)	0	148 (68.5%)	34 (15.9%)	21 (10.0%)	215
Pros. Tech.	0	2 (1.0%)	5 (2.6%)	101 (53.2%)	11 (5.8%)	71 (37.4%)	190
Orth. Tech	0	2 (1.0%)	1 (0.5%)	140 (69.6%)	13 (6.5%)	45 (22.4%)	201

TABLE XIII EDUCATIONAL LEVELS

TABLE XIV RECOMMENDED EDUCATIONAL LEVELS

	LEVELS						
CATEGORY	M.A.	B.S. or B.A.	A.A.	HIGH SCHOOL	TECH. SCHOOL	ELEM.	TOTAL
ProsOrth.	15 (10.2%)	61 (41.5%)	31 (21.1%)	26 (17.7%	14 (9.5%)		147
Pros.	7 (4.5%)	43 (27.6%	61 (39.1)	29 (18.6%)	16 (10.2%)		156
Orth.	8 (5.0%)	39 (25.0%)	63 (40.4%)	29 (18.6%)	17 (11.0%)		156
Pros. Tech.	0	3 (2.0%)	22 (14.6%)	48 (31.8%)	71 (47.0%)	7 (4.6%)	151
Orth. Tech.	0	2 (1.9%)	20 (18.9%)	53 (50.0%)	29 (27.3%)	2 (1.9%)	106

TABLE XV

PERSONS WITH MORE THAN HIGH SCHOOL EDUCATION

	CATEGORY				
	PROSTHETIST- ORTHOTIST	PROSTHETIST	PROSTHETIC TECHNICIAN	ORTHOTIST	ORTHOTIC TECHNICIAN
Above Median Salary Range	17 (54.8%)	30 (62.5%)	11 (57. <mark>9</mark> %)	32 (66.7%)	5 (33.3%)
Below Median Salary Range	14 (45.2%)	18 (37.5%)	8 (42.1%)	16 (33.3%)	10 (66.7%)
TOTAL	31	48	49	48	15

TABLE XVI PROFILE

	AGE (MEDIAN)	SALARY (MEDIAN)	EDUCATION (AVERAGE)	YEARS IN FIELD (MEDIAN)
Prosthetist-Orthotist	46	\$11.500*	High School	25
Prosthetist	44	9,500*	High School	18
Prosthetic Technician	37	5,900	High School	4.5
Orthotist	43	8,900*	High School	18
Orthotic Technician	36	6,000	High School	5

*These may be somewhat low because exact salaries over \$25,000 were not always given.

	TABLE	XVII		
DEMAND FOR	GRADUATESAND	ESTIMATE	0F	SALARIES

		NOW		FIVE YEARS
	NO.	SALARY	NO.	SALARY
B.S. Degree (P. & O.)	68	\$6,000 - 15,000	122	\$7,000 - 50,000
Certificate Program	59	3,120 - 12,000	113	5,200 - 15, <mark>000</mark>
AA Degree - Prosthetics	60	5, <mark>000</mark> - 10,000	116	6,000 - 15,000
AA Degree - Orthotics	59	5,000 - 12,000	82	5,000 - 17,000
AA Degree - 0. & P.	42	4,800 - 10,000	56	6,000 - 15,000
Orthotic - Internship	36	3,100 - 9,500	65	5,200 - 13,000
ProsOrth. Technician	80	3,600 - 8,000	146	4,000 - 15,000



NEEDED IN ONE YEAR



NEEDED IN FIVE YEARS





Figure 1. Graphic representation of percentage increases as shown in Table V.

	PROSTHETIST-ORTHOTISTS	PROSTHETISTS	ORTHOTISTS	
	YEARS IN FIELD	YEARS IN FIELD	YEARS IN FIELD	
PERSONNEL (Number)	0-9 10-19 20-29 30-39 40-49 Over 50	0-9 10-19 20-29 30-39 40-49 Over 50	0-9 10-19 20-29 30-39 40-49 Over 50	
100			· · · · · · · · · · · · · · · · · · ·	
80				
70			NT CONTRACTOR	
60				
50				
40	Concerned and the second		3.4	
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20	1212			
10				
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Figure 2. Number of years in field for Prosthetist-Orthotists, Prosthetists and Orthotists

	PROSTHETIC TECHNICIANS	ORTHOTIC TECHNICIANS
	YEARS IN FIELD	YEARS IN FIELD
PERSONNEL (Number)	0-9 10-19 20-29 30-39 40-49 Over 50	0-9 10-19 20-29 30-33 40-49 Over 50
140		
130		
120		
110		
100		
90		
80		
70		
60		
50		
40		
30		
20		
10		
0		

Figure 3. Number of years in field for Prosthetic Technicians and Orthotic Technicians

	PROSTHETIC TECHNICIANS	ORTHOTIC TECHNICIANS	
	YEARS IN FIELD	YEARS IN FIELD	
PERSONNEL (Number)	0-4 5-9 10-14 15-19	0-4 5-9 10-14 15-19	
100			
90			
80			
70			
60			
50			
40			
30	र्वे सम्ब		
20			
10			
0			

Figure 4. Number of years in field for Prosthetic Technicians and Orthotic Technicians (by smaller increments)