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Residency training: Why Army optometrists need it and how the Army would benefit

Francis L. McVeigh II
Pacific University
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Abstract
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RESIDENCY TRAINING: why army optometrists need it and how the army would benefit

By

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A thesis submitted to the faculty of the College of Optometry Pacific University Forest Grove, Oregon for the degree of Master of Science May, 1992

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Abstract

Army optometrists have war and peace time demands that would be best handled by residency trained optometrists. The needs and benefits of having residency trained individuals were obtained from information gathered by questionnaires which were sent to optometrists who served in Viet Nam (VN) and Operation Desert Storm (ODS), along with the Chiefs of each Army optometry clinic, Optometry College/School Residency Directors and the Director, Optometry Service, Department of Veterans Affairs (VA). Additional supporting evidence was gathered from the Army and the literature. In spite of the broad clinical practices performed by Army optometrists during peace time, about 50% used new medications, performed new procedures and treated new patient conditions during Operation Desert Storm. Eighty-eight percent of the VN OD's and 69% of the ODS OD's stated a residency program would have better prepared them for their war time mission. Significant cost savings have been documented with the reduction of referrals by a residency trained Army optometrist. Although 79% of the residency directors stated that their residents received nothing new beyond the four year optometry program, there were many matches between the Army optometrists' needs and the residency training.

Keywords: Army, residency, masters residency, optometry residency, Viet Nam, and Operation Desert Storm.
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Introduction

Today the Army offers internship, residency, and fellowship training in and out of service for physicians, dentists, podiatrists, and psychologists but not for optometrists. Building on the Army’s past and present commitment to post-graduate medical education, we sought to obtain data that would support our hypothesis; that the Army would benefit from having residency trained optometrists.

It is important to understand how the terms resident and fellowship originated, as well as how they are used in optometry today, if we are to recommend a specific post-graduate training program for Army optometrists. Even though optometric residencies differ from medical residencies in scope and intent, one must look to medicine to discover how the terms fellowship, residency and internship evolved. The origins of the medical internship can be found in the first formal system of hospital-based training which was established in England by the Society of Apothecaries in 1617. The term 'resident' emerged in the late 1700's at the Edinburgh Royal Infirmary to identify the young physicians working there. It was later adopted by the founders of early American medical schools who had trained in Edinburgh. Intern, a French term, was used to describe the medical training of France, which was similar to late 1700's and early 1800's English and Scottish residency training.

Specialization in the United States arose in the 1900's, and was obtained by undergoing medical training beyond the internship. Until 1927 this training was usually referred to by the Council on Medical Education, CME, as 'special internships'. Soon thereafter the term 'special internships' was replaced by the term 'residency'. Although the CME didn't adopt the term resident until after 1927 it was used at the John Hopkins Hospital in the 1890's. Residency referred to the sustained specialty training received at prestigious university hospitals beyond the internship training level.

The Mayo clinic developed a similar system but used a different term. The physicians in training became known as 'fellows' in 1912 because Dr. Mayo was not impressed by the Eastern internship and residency training programs. Therefore Dr. Mayo established a three year program affiliated with the graduate education department of an university. This differed from the John Hopkins program which was affiliated with a hospital.
Optometry residency has been defined as "an academic post-graduate program of prescribed length and content... which is available to clinical practitioners... is clinical in content, has as its goal the development of unique skills and competence in one or more areas of optometric practice... It includes a body of knowledge beyond that effectively covered in the undergraduate program." The term residency is often incorrectly used interchangeably with the term fellowship although they are clearly different. "Optometric fellowships are directed toward research, clinical, teaching development positions and not full-time clinical training."

A review of the 1991 ASCO Residency/Graduate Programs Directory supports these definitions. Only one of the fellowship programs required more than 50% of the optometrist's total time be spent in patient care. The directory also reveals that the fellowship programs have a greater emphasis in teaching and research than most of the residency programs. The masters residency programs consist of 40-50% of the total time in academic courses and research work and 40-50% of the time in clinical settings.

Although the optometric residency history does not date as far back as the medical residencies, its growth rate has been just as rapid. The first recorded post graduate optometric training program was a 15-week program in orthoptics and visual training. This program was started by SUNY College of Optometry in 1963. It was not until 1975 however, that an optometric residency program was established. This program was a hospital based residency at the Kansas City Missouri, Veterans Administration Hospital which was affiliated with the Illinois College of Optometry.

Since their start in 1975, residency programs have increased in both number and areas of concentration. A survey conducted by Talley and Reisenwitz in 1989 identified eight different areas of concentration and 113 positions. Of the 113 residency programs only 55 (56 as of 5/92) were accredited by the Council on Optometric Education and they provided a total of 80 residency positions. About 75 percent of these residencies were affiliated with the Veterans Administration. It is now estimated that 8% of graduating optometrists receive post-graduate clinical education.

It is not unrealistic to expect the Army to indorse optometric residency training, since the Army has long been involved in requiring post-graduate medical education. During World War I, before any civilian post-graduate requirements were regulated, the Army's Surgeon General required physicians to have a one year internship in addition to their
medical degree in order to be commissioned in the Medical Corps. In fact many physicians who claimed to be specialists proved to be inadequately trained and were rejected for not having adequate skills, including 51% of those claiming to be ophthalmologists.3

The high medical standards of the military continued, and in 1942 the AMA and the War Department worked together to identify those military physicians who were properly certified. The general specialist with no board or qualifying society, together with the self-styled specialist who could give no evidence of their skills, were generally commissioned as first lieutenants and the specialists were commissioned as captains. This created an incentive to specialize and to take boards. Furthermore those specialties that didn't have boards had an added stimulus to create boards.

On January 15, 1948, General Raymond Bliss, an Army Surgeon General, stated "I am sure you are well aware that professional quality is the keynote of our new orientation. We want our doctors to grow professionally. We want them to practice medicine in the Army- equal to the best in civilian life. The above will be attained through post-graduate training." He further stated that "the Army belongs to the people. Army medicine is a branch of American medicine." 11

In addition to requiring and encouraging post-graduate training, the Army established its own programs. These included the Army Nursing School in 1918, the Army internship program in 1920, and more recently the Uniformed Services University of the Health Sciences (Armed Forces Medical School). Furthermore the Army Air Surgeon instituted a 6 to 12 month residency program in medicine and surgery in 57 hospitals in 1943.11 These programs were proven effective during the Korean War, during which large numbers of Army and Navy residency graduates were credited with producing the lowest mortality rates in the history of warfare. In the 1960's, during General Heaton's term as the Army Surgeon General, an emphasis was placed on professional attainment, and as a result the number of residents and interns increased.

In spite of its history in requiring and encouraging graduate medical education and the growth of civilian and Veteran's Administration residency programs, the armed forces have lagged behind in optometry residency education. The two exceptions are the United States Air Force which is scheduled to start its second optometry residency program in July 1993 and the United States Army which has a residency program for civilian optometrists at West Point. Unfortunately the United States Army
and Navy do not offer residency training education opportunities for active duty optometrists.
Methods

Four questionnaires were sent out (see appendixes A-D). These included a Clinical Survey (12/89), to all the chiefs of optometry at US Army optometry facilities worldwide; a Viet Nam O.D. Questionnaire (6/91), to optometrists who served in Viet Nam; an Operation Desert Storm O.D. Questionnaire (7/91), to optometrists who served in Operation Desert Storm; and a Residency Director's Questionnaire (5/91), to US optometry schools and colleges including Puerto Rico and to the Director, Optometry Service, Department of Veterans Affairs (VA). Additional information was solicited from the Department of the Army: Office of the Surgeon General, Resource Management Directorate (see appendix E); US Total Army Personnel Command, Army Medical Department, Medical, Dental, and Medical Service Corps Branches; and from a residency trained US Army optometrist (see appendix F).

The needs information was obtained from the questionnaires sent to the chiefs of Army optometry clinics and to optometrists who served in Viet Nam (VN) and Operation Desert Storm (ODS). In these questionnaires, we attempted to obtain data about the peace and war time levels of clinical performance and expectations.

The Residency Director's questionnaire had two purposes: to obtain data on the skills, procedures, and knowledge presented in the residency program that were not provided in the four year degree program; and to match this information with the clinical performances and expectations recorded from the clinical survey and the VN/ODS questionnaires.

Benefit data was sought from the Army to attempt to demonstrate the actual and potential cost savings of residency trained optometrists, as well as, the current commitment that the Army has to post-graduate medical education. Additionally, the historical military commitment to post-graduate medical education and other benefit information was supported by a literature review.
Results

Clinical Survey

This survey consisted of twenty-three questions. One hundred percent of the 92 questionnaires were returned. These represented 95 different optometry locations including administrative, research, clinic, hospital, medical center, and field (division) assignments.

Of the locations where optometric clinical services were provided, 34% of the US including Hawaii and Alaska and 58% of the locations outside the continental US (OCONUS) did not have ophthalmologists available at their facilities. Thirty nine percent of the optometrists in the US and 33% in OCONUS referred patients to civilian ophthalmologists. Furthermore 49% of the optometrists in the US and 63% in OCONUS referred patients to military ophthalmologists, who were located at another installation.

Credentialed and clinical privileged are terms that have different meanings but are often used interchangeably by many people in the military. The author used the word credentialed in the clinical survey to mean, allowed to use, prescribe, and/or perform. The actual definition of clinically privileged is, authorized by the commander ... to provide specific patient care and treatment services in the organization ... 12 The responses to what are your optometrists credentialed to do were:

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>OCONUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPAs limited</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td>limited TPAs</td>
<td>77%</td>
<td>74%</td>
</tr>
<tr>
<td>unlimited TPAs</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>limited surgical procedures</td>
<td>74%</td>
<td>93%</td>
</tr>
<tr>
<td>(e.g., foreign body removal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cover emergency room call</td>
<td>32%</td>
<td>41%</td>
</tr>
</tbody>
</table>

When asked about the types of services provided by those surveyed the responses also indicated contact lenses, low vision, and vision training were prescribed.

Eighty one percent of the US and 33% of the OCONUS locations are accredited by the Council on Clinical Optometric Care, American Optometric Association. Seventy two percent of the US and 22% of the OCONUS have optometry externship programs.
The VN questionnaire consisted of 3 sections and 41 questions and the ODS questionnaire had 7 sections and 154 questions. Fifty three percent (40) of the VN and 100% (26) of the ODS questionnaires were returned. The VN optometrists who responded had graduated from 8 different optometry schools and the ODS optometrists from 12. The year of graduation from optometry school ranged from 1958-1970 for the VN OD's and from 1970-1989 for the ODS OD's. Eighty eight percent of the VN OD's and 69% of the ODS OD's responded positively to the question: Would a residency have better prepared you for your mission. Seventy five percent of the ODS OD's who responded no to the residency question, stated their reason for saying no was because they had many years of experience.

Additional information in regards to medications prescribed, procedures performed and patient conditions treated can be found in tables 1. a.-c. Several questionnaire responses were omitted from the tables. Three Vietnam questionnaires, numbers 26, 39 and 40, were excluded because they weren't fully completed. One ODS questionnaire, number 26, was excluded, because the optometrist spent a limited time in ODS and only examined special contact lens patients. The separate brigade responses were included with the division responses.

The ODS table headings represent the type of unit in which the optometrist was assigned. Div is division, hosp is general and station hospital, MEDSOM is Medical Supply, Optical, and Maintenance, CL is contact lens, and spec cl tm is special contact lens teams. The division and brigade optometrists were up front with the fighting soldiers. They were the first and often the only eye care practitioner the soldiers saw unless the soldiers had multiple serious injuries and were evacuated to a hospital. Hospital optometrists were co-located with an ophthalmologist. The MEDSOM optometrists were mainly responsible for supervising optical fabrication but also examined patients and performed other tasks. The contact lens team initially examined aviators and other soldiers who had special permission to wear contact lenses. Eventually these optometrists were reassigned to other units; one to a combat support hospital, one to a MEDSOM and two to evacuation hospitals. The special contact lens team optometrist only examined patients wearing contact lenses. His tour of duty was very short, lasting only thirty one days.
Optometry School/College Residency Director's Questionnaire

This questionnaire consisted of eight questions. One hundred percent of the 18 questionnaires were returned. This included 17 from optometry schools and one from the VA. Three schools (Ferris, Puerto Rico & Southeastern) didn’t have or weren’t affiliated with a residency/fellowship program. Only the results from the 14 schools which had residency/fellowship programs were recorded. The questions and responses were as follows:

What clinical skills/procedures, knowledge and experiences does each of your residency programs offer that are not provided in your O.D. curriculum?

79% nothing new, but the residents receive an increased exposure, depth, and degree, of clinical skills/procedures, knowledge and experiences and an increased level of management/treatment responsibility
7% chance to specialize
7% advanced diagnostic procedures
7% clinical rounds, clinical research, and graduate courses

What clinical skills/procedures, are your residency trained optometrists performing which they might not have if they had not completed your program?

57% increased level of patient management/treatment responsibility, especially with unusual patient conditions
14% teaching at optometric institutions and presenting continuing education
14% performing many advanced procedures

What types of patient conditions are your residency trained optometrists treating which they might not have if they had not completed your program?

36% unusual and more difficult patient conditions that require an increased depth of knowledge and level of management/treatment responsibility
29% ocular disease
21% many (depends on residency)
Being as specific as possible, how have application rates for your residency programs changed since their start? Be as specific as possible on the rate of change.

- 57% increase
- 14% decrease
- 14% no change
- 14% variable

In your opinion, why aren’t more optometrists entering residency programs?

- 100% money (debt, low stipend)
- 29% family (relocation and expenses)
- 21% not informed of benefits
- 14% not enough spots (competition)
- 14% no post residency positions
- 7% lack of benefits
- 7% delay in starting career

List the advantages of having residency trained optometrists and make any other comments that support the needs and benefits of having residency trained optometrists.

Although there were multiple answers, some responses included; better clinicians produced, better care provided, increased marketability, enhanced teaching abilities, increased confidence and knowledge, excellent diagnostic and patient management skills, more efficient care rendered, excellent role models produced, and an increased bond with the profession is developed.

If you could have military optometrists enrolled in your residency programs at no extra costs, i.e., no stipend paid by your school, would you consider expanding the number of available positions in your residency programs?, This question was answered in two parts.

- 100% yes
- 86% yes
- 7% possibly
- 7% no
Army Data

Civilian Health and Medical Program of the Uniformed Services, CHAMPUS, Civilian Ophthalmologist Referral Costs were obtained from the Army. These reports included the amount of money the government reimburses civilian health care providers for providing medical services to eligible beneficiaries. These expenses are incurred when eligible persons seek health care from civilian practitioners often because military practitioners are not available.

CHAMPUS Health Care Summary Reports for the period 10/89-9/90 from 11 of the 22 US locations where Army OD's refer to civilian ophthalmologists were obtained. The costs for ophthalmology care ranged from $20,016.00 to $247,173.00 dollars per year per location. The average cost per visit was $97.38 for 13,695 visits and 55 admissions, which totaled $1,333,618.00. Two locations without any admission visits, had an average cost of $90.20 per outpatient visit.

Data were obtained from an Army optometrist who is civilian residency trained. He has been working in an Army optometry clinic since December 1989. During this time he decreased outside referrals from approximately 800/year before his arrival, to approximately 80/year. This was a referral rate decrease from about 30% to 1.5% of all patients seen at his clinic.
DISCUSSION

The optometrists who served during VN and in ODS performed superbly and contributed immensely to the visual needs and ocular health of the fighting soldiers. However, their questionnaire responses and the clinical survey responses strongly suggest that increased training beyond the four year optometry program would better prepare optometrists for their peace and war time missions. Additionally the majority of the optometrists who served during VN and ODS felt that they would have been better prepared if they had been residency trained. Lastly, the actual and potential cost savings the government would realize, if they had residency trained optometrists is significant.

The clinic survey questionnaire responses revealed that the majority of optometrists both in the US and OCONUS locations are using therapeutic pharmaceutical agents (91-99%), and removing foreign bodies (74-93%). In addition 32-41% are responsible for covering the emergency room. These optometrists are providing a wide range of services to include contact lenses, vision therapy and ocular emergency care. In spite of this broad scope of peace time clinical practice, the ODS responses from the division and hospital optometrists, who were primarily responsible for providing broad scope optometric care, showed that 46-50% used new medications, 39-50% performed new procedures and 39-50% treated new patient conditions. The author believes that these optometrists had to expand their scope during ODS because they weren't clinically privileged in their peace time clinics to do the things expected of them during war. This opinion is supported by data in tables 1. a.-c. This failure to prepare can easily be corrected since the war time expectations fall within the clinical knowledge and skill level of today's optometrists, particularly, if they have completed a residency training program.

The VN responses showed that 68-70% of the optometrists used new medications, performed new procedures and treated new patient conditions, indicating a consistent need over the past twenty years for optometrists to expand their scope during a war. This is true even though an enormous amount of changes have occurred in the four year optometry program curriculum. Thus, unless clinical privileges are increased during peace time, or additional training is obtained beyond the four year optometry program, optometrists will go into the next war and once again be called upon to provide an increased scope of practice. This is in direct contradiction with some of the Army's main goals, "Be prepared for war," and "Train to Fight and Fight to Train." Furthermore the manner in
which the Army wants its soldiers to prepare for war is to perform on a daily basis, those functions that will be expected of them during war.

Division optometrists made up 50% of the ODS OD's and saw the majority of the patients. Twenty percent of these optometrists stated they expanded the medications they could prescribe after ODS because they felt more confident. An additional 20% said they had acquired increased education. Thirty three percent of these optometrists also stated that increased confidence caused them to expand the procedures they performed and 40% said this is why they expanded the patient conditions they treated.

Fourteen percent of the division optometrists stated the reason they didn't expand medications was because they lacked the clinical knowledge. This was the same percentage that stated they did not expand the procedures they performed due to lack of clinical knowledge. Another 14% said they didn't expand the procedures they performed because they lacked clinical confidence. It is important to note that most of these optometrists, having been out of optometry school for eight years or more, are clinically experienced. As can be seen from this data, the reason for expanding or not expanding the scope of practice often relates to confidence and clinical knowledge.

Ninety three percent of the residency directors responded that increased clinical knowledge and/or confidence were benefits of their programs. Additionally, Bartlett stated, "residents emerge from their programs as clinically competent practitioners who are self confident." It was extremely interesting to the author that 79% of the residency directors stated their residents received nothing new beyond the four year optometry program but the residents did get an increased depth, degree and exposure of clinical skills/procedures, knowledge, and level of management/treatment responsibility. This is exactly the training needed for Army optometrists to practice full scope optometry which is required during peace and war times.

Other parallels were seen between the peace time clinical needs and residency directors replies. Seventy two percent of the US clinics have externship programs. Additionally, in 1992, twenty seven optometrists, who have just graduated from optometry school, will enter the Army. These externs and new optometrists need to be mentored by optometrists with exceptional military and clinical acumen to improve their efficiency and prepare them for future demands. The residency directors reported that their residency trained graduates have enhanced teaching abilities and are excellent role models. This concept is supported by Grovsenor who...
stated, "masters residency trained optometrists are the best qualified to be teachers in the optometric schools and colleges." Furthermore, Hoffman and others have reported that residency trained optometrists become excellent role models.

It has been shown that externship programs are a good means of recruiting optometrists. If we had residency trained optometrists at the externship sites, we could provide an enhanced quality program; attract more externs, who examine patients; and perhaps recruit optometrists. This could be expanded into Army Optometric Residency Programs (AORPs) in the future, once we have developed a cadre of residency trained individuals.

Another benefit of having residency trained optometrists is the cost savings that can be obtained from decreased referrals. Thirty four percent of the US and 58% of the OCONUS optometry locations have no ophthalmologist available at their facilities. Thirty nine percent of the optometrists in the US and 33% in OCONUS responded in the 1990 clinical survey questionnaire that they referred patients to civilian ophthalmologists. Additionally 49% of the optometrists in the US and 63% in OCONUS referred patients to military ophthalmologists who were located at another installation.

Residency training and increased credentialing of the scope of practice can reduce the number of referrals. Seventy nine percent of the residency directors stated that their graduates had an increased level of patient management and treatment responsibility and were able to handle more difficult cases. Amos stated, "...residency programs give the resident a large amount of experience in direct patient care far beyond the level the resident possessed upon graduation. It is the most powerful method I have observed." This has been documented in the Army. An Army optometrist, who is residency trained, has significantly reduced the number of patients referred to other health care providers, from approximately 800 per year to 80 per year. If you use $70.00 as an average outpatient visit cost for this area, this represents a savings of over $50,000.00 per year. The potential savings is much greater, since this is only one of the twenty-two Army locations in the US without an ophthalmologist. In addition to reducing referrals the residents become more efficient. Rakes reported "residents become more efficient in examining large numbers of patients and in most cases 'chair time' will drop 50% or more after 12 months of training."
The optometric profession has grown tremendously over the past twenty years. Eight percent of the optometry graduates will attend residency programs, and the number of applicants are increasing. Soon the optometrists who have completed residency training will represent the majority of optometrists who have received post-graduate training. The military has been on the cutting edge of medical education and standards for many years. We have shown countless documented needs and benefits of having residency trained Army optometrists. If you add to these facts that optometrists have a war time mission and the number of Army health care providers is being reduced, it is hard to imagine anyone not approving residency training for Army optometrists. In order to be prepared for war, as well as, peace time, we must fight to train.
References


References (continued)


TABLES
### TABLE 1.a.

VIET NAM/OPERATION DESERT STORM: MEDICATIONS
Table 1. a. Viet Nam/Operation Desert Storm: Medications

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>VIETNAM</th>
<th>ODS (div/hosp)</th>
<th>ODS (MEDSOM)</th>
<th>ODS (CL Team)</th>
<th>ODS (spec cl tm)</th>
<th>ODS (all units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. medications prescribed</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
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<tr>
<td>antibiotic (topical)</td>
<td>65</td>
<td>100/100</td>
<td>83</td>
<td>100</td>
<td>100</td>
<td>96</td>
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<tr>
<td>antibiotic (oral)</td>
<td>0</td>
<td>31/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
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<tr>
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<td>92/50</td>
<td>50</td>
<td>75</td>
<td>0</td>
<td>73</td>
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<td>glaucoma (topical)</td>
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<td>62/50</td>
<td>33</td>
<td>25</td>
<td>0</td>
<td>46</td>
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<td>2. Rx meds not clinically privileged prior</td>
<td>73</td>
<td>46/50</td>
<td>33</td>
<td>25</td>
<td>100</td>
<td>44</td>
</tr>
<tr>
<td>3. rxd new meds</td>
<td>68</td>
<td>46/50</td>
<td>33</td>
<td>25</td>
<td>0</td>
<td>39</td>
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<tr>
<td>4. did you expand meds you could Rx after</td>
<td>30</td>
<td>23/50</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>15</td>
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<tr>
<td>5. why did you expand</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>felt more confident</td>
<td>46</td>
<td>20/100</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>felt obligation to practice full scope optometry</td>
<td>30</td>
<td>60/0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>acquired increased education</td>
<td>23</td>
<td>20/0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>22</td>
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<tr>
<td>6. why didn't you expand meds after</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
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<tr>
<td>lacked the clinical knowledge</td>
<td>15</td>
<td>17/0</td>
<td>0</td>
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<td>10</td>
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</tr>
<tr>
<td>state laws didn't allow</td>
<td>48</td>
<td>0/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ophthalmologist opposition</td>
<td>0</td>
<td>33/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

div = division + brigade OD responses: hosp = station + general hospital OD responses: MEDSOM = Medical Supply, Optical & Maintenance OD responses CL = contact lens team OD responses: spec cl tm = special contact lens team OD responses
TABLE 1.b.

VIET NAM/OPERATION DESERT STORM: PROCEDURES
Table 1. b. Viet Nam/Operation Desert Storm: Procedures

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>VIETNAM</th>
<th>ODS (div/hosp)</th>
<th>ODS (MEDSOM)</th>
<th>ODS (CL Team)</th>
<th>ODS (spec cl tm)</th>
<th>ODS (all units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. procedures performed</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>foreign body removal</td>
<td>73</td>
<td>100/100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>corneal debridement</td>
<td>49</td>
<td>85/0</td>
<td>33</td>
<td>25</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>chalazion incision and drainage</td>
<td>24</td>
<td>15/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>suturing</td>
<td>14</td>
<td>23/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>8. performed proc not clin privileged prior</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>9. performed new procedures</td>
<td>68</td>
<td>39/50</td>
<td>33</td>
<td>25</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>10. did you expand procedures after</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>11. why did you expand procedures</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>felt more confident</td>
<td>42</td>
<td>33/0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>felt obligation to practice full scope optometry</td>
<td>26</td>
<td>50/0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>acquired increased education</td>
<td>16</td>
<td>0/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12. why didn't you expand procedures after</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>lacked the clinical knowledge</td>
<td>10</td>
<td>14/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>lacked the clinical confidence</td>
<td>7</td>
<td>14/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>pt conditions didn't require expansion</td>
<td>17</td>
<td>43/0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>state law wouldn't allow expansion</td>
<td>40</td>
<td>0/0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ophthalmologist opposition</td>
<td>0</td>
<td>14/0</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

div = division + brigade OD responses: hosp = station + general hospital OD responses: MEDSOM = Medical Supply, Optical & Maintenance OD responses: CL = contact lens team OD responses: spec cl tm = special contact lens team OD responses
<table>
<thead>
<tr>
<th>TABLE 1.c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIET NAM/OPERATION DESERT STORM: PATIENT CONDITIONS</td>
</tr>
</tbody>
</table>
### Table 1. c. Viet Nam/Operation Desert Storm: Patient Conditions

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>VIETNAM</th>
<th>ODS (div/hosp)</th>
<th>ODS (MEDSOM)</th>
<th>ODS (CL Team)</th>
<th>ODS (spec cl tm)</th>
<th>ODS (all units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. conditions treated</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>iritis</td>
<td>41</td>
<td>92/100</td>
<td>67</td>
<td>50</td>
<td>0</td>
<td>77</td>
</tr>
<tr>
<td>corneal ulcers</td>
<td>32</td>
<td>69/50</td>
<td>67</td>
<td>50</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td>conjunctivitis</td>
<td>76</td>
<td>100/100</td>
<td>83</td>
<td>100</td>
<td>0</td>
<td>92</td>
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<td>suspected L/RFR injuries</td>
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<td>0</td>
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<td>14. Txd cond not clinically privileged prior</td>
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<td>39/50</td>
<td>33</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
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<td>15. treated new conditions</td>
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<td>39/50</td>
<td>50</td>
<td>75</td>
<td>0</td>
<td>46</td>
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<td>16. did you expand cond you could Tx after</td>
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<td>23/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>17. why did you expand conditions</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
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<td>felt more confident</td>
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<td>40/100</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>felt obligation to practice full scope optometry</td>
<td>19</td>
<td>60/0</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>acquired increased education</td>
<td>19</td>
<td>0/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18. why didn't you expand conditions after</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>lacked the clinical knowledge</td>
<td>10</td>
<td>0/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>lacked the clinical confidence</td>
<td>10</td>
<td>0/0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ophthalmologist opposition</td>
<td>0</td>
<td>25/0</td>
<td>33</td>
<td>50</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

div = division + brigade OD responses; hosp = station + general hospital OD responses; MEDSOM = Medical Supply, Optical & Maintenance OD responses; CL = contact lens team OD responses; spec cl tm = special contact lens team OD responses
Name and location of your facility:

AUTOVON or FTX number:

1. Please list your authorizations, requirements, and the actual number of the following:

<table>
<thead>
<tr>
<th>Position</th>
<th>Authorized</th>
<th>Required</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optometrist (civilian/military)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42E (TOE)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptionist/typist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian technician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian optician</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How many clinics does your installation have? If more than one, list their location(s) --------------------------------------------------

3. How many fully equipped examination/treatment rooms does each clinic have? ________________________________

4. How would you describe the equipment in those rooms?
   - Excellent (number of lanes) 
   - Satisfactory (number of lanes) 
   - Not usable (number of lanes) 

5. Do you have the following equipment in your clinic?
   - Automated field analyzer
     - Yes
     - No
   - Fundus camera
     - Yes
     - No
   - Anterior segment camera
     - Yes
     - No
   - Auto-refractor
     - Yes
     - No
   - Automated keratometer
     - Yes
     - No
   - Automated lensometer
     - Yes
     - No
   - Please list any other special equipment in your clinic

6. What level of the following specialty services do you offer?
   - Contact lenses
     - Full service
     - Limited service
     - Not offered
   - Low vision
     - Full service
     - Limited service
     - Not offered
   - Visual training
     - Full service
     - Limited service
     - Not offered
   - Other (e.g. EFMP, electrodiagnostics)
     - Full service
     - Limited service
     - Not offered
7. What is your estimated patient workload (percent of total) in the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Workload %</th>
<th>Backlog days, wks, mos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active duty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependents of active duty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retired and their dependents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Which of the following areas of Occupation Vision are you involved:

- Identifying eye-hazard areas
- Performing Vision Screening for OVP: (VDT___ Laser___ RFR___ OTHER___)
- Managing safety glasses program
- Serving as the local Occupational Vision Consultant
- Reviewing/providing input for all local OVP regulations and SOPs
- Regularly visiting eye-hazard areas/shops/operations
- Providing occupational vision health education

9. Is there adequate space for administrative tasks in your clinic? ___

10. Where is the Optometry clinic located?

<table>
<thead>
<tr>
<th>Option</th>
<th>___</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate clinic</td>
<td></td>
</tr>
<tr>
<td>Co-located with Ophthalmology</td>
<td></td>
</tr>
<tr>
<td>Located with EENT</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

11. Where is the Ophthalmology service located at your facility?

<table>
<thead>
<tr>
<th>Option</th>
<th>___</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-located with the optometry clinic</td>
<td></td>
</tr>
<tr>
<td>In the same building</td>
<td></td>
</tr>
<tr>
<td>In a different building</td>
<td></td>
</tr>
<tr>
<td>Not available</td>
<td></td>
</tr>
</tbody>
</table>

12. If an ophthalmology service is not available, is the referral policy:

- To a civilian ophthalmologist
- To another military medical facility
- If to another military facility, please specify which facility and its distance from your clinic
- In addition, is consultation available by phone?

13. What additional duties (medical and/or administrative) are assigned to optometrists at your facility?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

14. Is there a Reception Station at your installation that requires optometric support?

- If yes, what percentage of your duty time is spent in the reception center?
- What is the average number of patients examined per day per optometrist at the Reception Station?

2
15. If you are assigned to a TOE unit:

How often and for how long do Optometrists go to the field? ____

Are Optometrists performing optometry-related tasks in the field? ____

What percentage of your time is spent doing non-optometry related tasks while in garrison and in the field? ______/______ How often do TO&E Optometrist(s) interact with nearby TDA optometrists? ____

16. If you are not assigned to a TOE unit, is any member of the staff assigned to a TOE unit? ________________

17. Is your facility accredited by the Council on Clinical Optometric Care (if yes, what level and when is the expiration date)? ______/_______

18. Does your clinic have an optometric externship program? ___________ If yes, with what school(s)/college(s)? __________________________

19. Are optometrists at your facility credentialed to:

Use diagnostic drugs? ________

Use limited ocular therapeutic drugs? _________

Use unlimited ocular therapeutic drugs? _________

Perform limited surgical procedures (e.g. foreign body removal)? _____

Cover emergency room call? _________________

20. What is the position/title of the individual who acts as the rater and senior rater for the following people:

<table>
<thead>
<tr>
<th>Rater</th>
<th>Senior Rater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief of Optometry</td>
<td>____________</td>
</tr>
<tr>
<td>Assistant Chief</td>
<td>____________</td>
</tr>
<tr>
<td>Staff Optometrist(s)</td>
<td>____________</td>
</tr>
</tbody>
</table>

21. Are you satisfied with your rating scheme? If no, how would you change it? __________________________________________________________

22. What do you like the most about Army optometry? ________________

23. What do you like the least about Army optometry? ________________
APPENDIX B

VIET NAM OPTOMETRIST QUESTIONNAIRE
June 15, 1991

Dear Optometrist,

I am a graduate student enrolled at Pacific University’s Optometry School. Since graduating from the University of Houston Optometry’s school in 1983 I have served in the US Army. My thesis project consists of documenting the needs and benefits of having residency trained Army optometrists. My goal is to have the Army’s Surgeon General approve residency training for Army optometrists.

As a veteran of the Vietnam war your comments on the attached questionnaire about your experiences plus comments from Operation Desert Storm optometrists will lend factual support to our goal. It is our belief that war time situations demand that the optometrist provide as broad a scope of practice as possible. Furthermore we feel that an optometrist would be better prepared to perform their war time mission if they were residency trained. Just as your Vietnam experiences greatly enhanced the optometric profession following the war we anticipate a similar effect because of the Operation Desert Storm optometrists accomplishments.

Your responses will be kept confidential, while the aggregate of responses in the sample will be prepared for publication in a future journal article. Because you are one of only ninety optometrists to receive this questionnaire, your response is very important. Please complete the questionnaire within two weeks of receipt. A preaddressed, postage-paid business reply envelope is enclosed for your convenience.

Thank you very much for your contribution to this important optometric research, which we are confident will influence the future of Army optometry.

A. Richard Reinke
Interim Dean

Francis L. McVeigh II
Graduate Student
VIETNAM QUESTIONNAIRE

GENERAL INFORMATION

1. What year and from which Optometry School/College did you graduate? 19__ / _______________________________________________________________________

CLINICAL

2. Check the medications you prescribed during your Vietnam tour.
   - ☐ antibiotics
   - ☐ antifungals
   - ☐ antivirals
   - ☐ steroids
   - ☐ non steroidal anti-inflammatory
   - ☐ decongestants
   - ☐ artificial tears
   - ☐ other ocular lubricants
   - ☐ glaucoma
   - ☐ analgesics
   - ☐ local anesthetics
   - ☐ other (specify) ____________

3. Were you able to prescribe the medications needed to treat your patients during Vietnam? ☐ Yes ☐ No (If yes, skip to #5.)

4. If the answer to #3 was no, list the medications you wanted to prescribe but couldn't and state the reason why, e.g., division surgeon did not allow me to prescribe steroids; couldn't obtain antivirals; or other (be specific).

5. Did you prescribe medications during your Vietnam tour that you weren't clinically privileged to prescribe at your pre Vietnam assignment location? ☐ Yes ☐ No (If no, skip to #7.)

6. Check which types of medications below that you prescribed during Vietnam that you weren't clinically privileged to prescribe prior to Vietnam.
   - ☐ antibiotics
   - ☐ antifungals
   - ☐ antivirals
   - ☐ steroids
   - ☐ decongestants
   - ☐ non steroidal anti-inflammatory
   - ☐ artificial tears
   - ☐ other ocular lubricants
   - ☐ glaucoma
   - ☐ analgesics
   - ☐ local anesthetics
   - ☐ other (specify) ____________

________________________________________________________________________
7. Did you prescribe medications during your Vietnam tour that you chose not to prescribe at your pre Vietnam assignment location?
☐ Yes  ☐ No  (If no, skip to #9.)

8. Check which types of medications below that you prescribed during Vietnam, that you chose not to prescribe prior to Vietnam.
☐ antibiotics  ☐ antifungals  ☐ antivirals  ☐ steroid
☐ decongestants  ☐ non steroidal anti-inflammatory
☐ artificial tears  ☐ other ocular lubricants  ☐ glaucoma
☐ analgesics  ☐ local anesthetics  ☐ other (specify)___________

9. If you prescribed medications during Vietnam that you didn't prior to Vietnam, check one of the following reasons why.
☐ was given broader clinical privileges during Vietnam
☐ felt it was my duty
☐ had no choice, i.e., was told to do it
☐ other (specify) __________________________________________

10. If you prescribed medications during Vietnam that you didn't prior to Vietnam, answer the following question.
After Vietnam I expanded the types of medications that I could prescribe beyond what I was clinically privileged or chose not to prescribe prior to Vietnam.  ☐ Yes  ☐ No  (If no, skip to #13.)

11. If your answer to #10 was yes, check what type of new medications below you began to prescribe after Vietnam that you hadn't prescribed prior to Vietnam.
☐ antibiotics  ☐ antifungals  ☐ antivirals  ☐ steroid
☐ decongestants  ☐ non steroidal anti-inflammatory
☐ artificial tears  ☐ other ocular lubricants  ☐ glaucoma
☐ analgesics  ☐ local anesthetics  ☐ other (specify)___________

12. If your answer to #10 was yes, check why you began prescribing medications after Vietnam beyond what you prescribed prior to Vietnam.
☐ felt more confident in my clinical abilities
☐ felt that I had an obligation to perform as full of a scope of practice as possible
☐ other (specify) __________________________________________
13. If your answer to #10 was no, check why after Vietnam you didn’t expand the medications that you could prescribe beyond what you prescribed prior to Vietnam.

- could prescribe all the medications needed after Vietnam
- lacked the clinical knowledge
- lacked the clinical confidence
- patient conditions after Vietnam didn’t require the type of medications that were needed during Vietnam
- other (specify) _______________________________________________________________________

14. Check the procedures you performed during Vietnam other than routine refractive ones.

- foreign body removal
- corneal debridement
- chalazion injection
- chalazion incision and drainage
- suturing (specify the anatomical structure)
- other (be specific) _______________________________________________________________________

15. Were you able to perform the procedures needed to diagnose and treat your patients during Vietnam? □ Yes □ No (If yes, skip to #17.)

16. If the answer to #15 was no, list the procedures you wanted to perform but couldn’t and state the reason why, e.g., division surgeon did not allow me to perform corneal debridement; couldn’t perform ophthalmoscopy because I couldn’t obtain an ophthalmoscope; or other (be specific).

17. Did you perform procedures during your Vietnam tour that you weren't clinically privileged to perform at your pre Vietnam assignment location? □ Yes □ No (If no, skip to #19.)

18. Check what types of procedures below that you performed during Vietnam that weren't clinically privileged to perform prior to Vietnam.

- foreign body removal
- corneal debridement
- chalazion injection
- chalazion incision and drainage
- suturing (specify the anatomical structure) ___________
- other (be specific) _______________________________________________________________________
19. Did you perform procedures during your Vietnam tour that you chose not to perform at your pre Vietnam assignment location?
☐ Yes ☐ No (If no, skip to #21.)

20. **Check** what types of procedures below that you performed during Vietnam that you chose not to perform prior to Vietnam.
☐ foreign body removal ☐ corneal debridement
☐ chalazion injection ☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) __________
☐ other (be specific) ______________________________________________________________________

21. If you performed procedures during Vietnam that you didn't prior to Vietnam, **check** one of the following reasons why.
☐ was given broader clinical privileges during Vietnam
☐ felt it was my duty
☐ had no choice, i.e., was told to do it
☐ other (specify) ______________________________________________________________________

22. If you performed procedures during Vietnam that you didn't prior to Vietnam, answer the following question.

After Vietnam I expanded the types of procedures that I could perform beyond what I was clinically privileged or chose not to perform prior to Vietnam. ☐ Yes ☐ No (If no, skip to #25.)

23. If your answer to #22 was yes, **check** what type of new procedures below you began performing after Vietnam that you hadn’t performed prior to Vietnam.

☐ foreign body removal ☐ corneal debridement
☐ chalazion injection ☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) __________
☐ other (be specific) ______________________________________________________________________

24. If your answer to #22 was yes, **check** why you began performing procedures beyond what you performed prior to Vietnam.

☐ felt more confident in my clinical abilities
☐ felt that I had an obligation to perform as full of a scope of practice as possible
☐ other (specify) ______________________________________________________________________
25. If your answer to #22 was no, check why after Vietnam you didn't expand the procedures that you could perform beyond what you performed prior to Vietnam.

☐ could perform all the procedures needed after Vietnam
☐ lacked the clinical knowledge
☐ lacked the clinical confidence
☐ patient conditions after Vietnam didn’t require the type of procedures that were needed during Vietnam
☐ other (specify) ________________________________

26. Check the patient conditions other than routine refractive conditions that you treated during Vietnam.

☐ ocular embedded foreign bodies ☐ iritis ☐ corneal ulcers
☐ conjunctivitis ☐ other (be specific) ________________________________

27. Were you able to treat the patient conditions presented to you that you wanted to treat during Vietnam? ☐ Yes ☐ No (If yes, skip to #29.)

28. If the answer to #27 was no, list the patient conditions you wanted to treat but couldn't and state the reason why, e.g., was not allowed to treat corneal ulcers, or other (be specific).

29. Did you treat patient conditions during your Vietnam tour that you weren't clinically privileged to treat at your pre Vietnam assignment location? ☐ Yes ☐ No (If no, skip to #31.)

30. Check what types of patient conditions below that you treated during Vietnam that you weren't clinically privileged to treat prior to Vietnam.

☐ ocular embedded foreign bodies ☐ conjunctivitis ☐ iritis
☐ corneal ulcers ☐ other (be specific) ________________________________

31. Did you treat patient conditions during your Vietnam tour that you chose not to treat at your pre Vietnam assignment location? ☐ Yes ☐ No (If no, skip to #33.)
32. **Check** what types of patient conditions below that you treated during Vietnam that you chose not to treat prior to Vietnam.
- ☐ ocular embedded foreign bodies  ☐ conjunctivitis  ☐ iritis
- ☐ corneal ulcers  ☐ other (be specific) ________________________

33. If you did treat patient conditions during Vietnam that you didn't treat prior to Vietnam, **check** one of the following reasons why.
- ☐ was given broader clinical privileges during Vietnam
- ☐ felt it was my duty
- ☐ had no choice, i.e., was told to do it
- ☐ other (specify) ________________________

34. If you treated patient conditions during Vietnam that you didn't prior to Vietnam, answer the following question.
After Vietnam I expanded the types of patient conditions that I could treat beyond what I was clinically privileged or chose not to treat prior to Vietnam. ☐ Yes ☐ No (If no, skip to #37.)

35. If your answer to #34 was yes, **check** what type of new patient conditions below you began treating after Vietnam that you hadn't treated prior to Vietnam.
- ☐ embedded foreign bodies  ☐ iritis  ☐ corneal ulcers
- ☐ other (be specific) ________________________

36. If your answer #34 was yes, **check** why you began treating patient conditions beyond what you treated prior to Vietnam.
- ☐ felt more confident in my clinical abilities
- ☐ felt that I had an obligation to perform as full of a scope of practice as possible
- ☐ other (specify) ________________________

37. If your answer to #34 was no, **check** why after Vietnam you didn’t expand the patient conditions you treated beyond what you treated prior to Vietnam.
- ☐ could treat the patient conditions needed after Vietnam
- ☐ lacked the clinical knowledge
- ☐ lacked the clinical confidence
- ☐ patient conditions after Vietnam didn’t require the type of treatment that was needed during Vietnam
- ☐ other (specify) ________________________
38. What were the biggest optometric and non-optometric problems you faced prior to, during, and after deployment? Include possible solutions.

Prior:

During:

After:

39. Do you think that completion of an Optometric Residency Training Program, if it was available at the time, would have better prepared you for your mission? □ Yes □ No If yes, list what type e.g., primary care, and in what ways? If no, why not?
40. How did your Vietnam experiences and the experiences of other Vietnam optometrists influence the profession of Optometry in the civilian and military environments. Please consider both the short and long term effects.

41. Feel free to add additional comments below and on a continuation sheet of paper if necessary.

THANKS
APPENDIX C

OPERATION DESERT STORM OPTOMETRIST QUESTIONNAIRE
Dear MAJ Optometrist

I need your assistance in providing some data. I realize you are extremely busy, however, you will help improve our profession by responding to the following questionnaire.

The bottom line is, I want to begin residency training for Army optometrists. To facilitate this, I have tasked Major McVeigh to gather supporting facts. He also has several other related goals.

The first step is to document daily optometric demands in the Army to justify the need for optometric residency training. This information will then be combined with other data to write a decision paper for the Army's Surgeon General. It will reference starting Optometric Residency Training Programs, as well as, a masters thesis.

This vital information will also help us in the combat developments arena to enhance the quality and quantity of optometric services and the number of required optometrists. Furthermore, this information can assist us in preparing for future military conflicts.

Please send all requested information to Major Fran McVeigh, 3352 Lavina Dr., Forest Grove, Oregon 97116.

Only you can improve Army optometry. There will be immediate benefits from this documented information.

John F. Pyle
Colonel, MS
Chief, Army Optometry
ODS QUESTIONNAIRE

GENERAL INFORMATION

1. What year and from which Optometry School/College did you graduate? 19__ / ________________________________

2. List the inclusive dates of your ODS tour. from / / m/d/y to / / m/d/y
How many of these days did you treat patients? ____ days

3. To what type of unit were you assigned?
☐ heavy division ☐ light division ☐ MEDSOM ☐ hospital
___________(Please list specific type of hospital, e.g., Evacuation, Combat Support, Field, General, etc.)

4. Did you serve with the unit during ODS that you were assigned to prior to ODS? ☐ Yes ☐ No

5. Did you volunteer to serve in ODS without being asked? ☐ Yes ☐ No

6. To approximately how many personnel were you responsible for providing optometric support? ___________________

7. Approximately how many (total) patients did you examine in the Middle East? ______

8. Once the ground war began, how did the number and type of patients seen by you differ from those before the ground war? Please make a specific statement, e.g., treated 25% more ocular injuries and 15% less refractive errors; and the total amount of patient encounters decreased by 50%.

9. Approximately how many hours per day did you examine patients? __________ hours

10. Approximately how many days a week did you examine patients? __________ days
11. In what type of facility were you working?  
- tent  
- bunker  
- fixed facility  
- other (specify) 

12. In what type of facility did you sleep?  
- tent  
- bunker  
- fixed facility  
- other (specify) 

13. How often did you change your location?  
- daily  
- weekly  
- never  
- other (specify) 

14. If you changed location, how long did it take to tear down and set up the eye section? tear down ___ hrs, set up ___ hrs 

15. Were the assigned division and/or other units' personnel that you supported, optically ready for deployment?  
- Yes  
- No  

16. If the answer to #15 was no, what did the personnel lack?  
- two pair of clear glasses  
- tinted glasses  
- P M I s  
- B L P S inserts  
- other (specify) 

17. What is your perception why the personnel weren’t optically ready?  
- lack of command support for optometric preparedness  
- not enough optometrists assigned to the unit prior to deployment  
- other (specify) 

18. List the types of non optometric duties that you performed and specify how frequently and for how long they were performed, e.g., officer of the guard, weekly for 24 hour shifts; physical training, daily for 60 minutes; report of survey officer...; etc. 

19. Did you provide the line command optometric/ophthalmic statistics and advice (to include ocular health/prevention)?  
- Yes  
- No  

If yes, how frequently (weekly), how long (minutes) and in what format (written or oral reports) did you do this, e.g., weekly, ten minute, oral briefings?
20. Did you provide the Division Surgeon optometric/ophthalmic statistics and advice (to include ocular health/prevention)?
☐ Yes ☐ No  If yes, how frequently (weekly), how long (minutes), and in what format (written or oral reports) did you do this, e.g., weekly, ten minute, oral briefings?

21. Did you use the "Eye Injury Report Form"?  ☐ Yes ☐ No  If not, why not?

STAFFING

22. How many O.D.s counting yourself, treated patients at your same location? _______ (If you were the only O.D., skip to #25.)

23. If more than one O.D. treated patients at your same location, were they all Army O.D.s?  ☐ Yes ☐ No  (If yes, skip to #25.)

24. If more than one O.D. treated patients at your same location, and they weren't all Army O.D.s what service and how many of each service were there?  ☐ Air Force _____ ☐ Navy______

25. How many 91Ys were working with you? ______
Was this adequate?  ☐ Yes ☐ No
If not, how many would you recommend? ______

26. How many 42Es were working with you? ______
Was this adequate?  ☐ Yes ☐ No
If not, how many would you recommend? ______

27. Were there any enlisted personnel working directly with you other than 91Ys or 42Es?  ☐ Yes ☐ No
If so, how many and what were their MOSs? _____#/_______ MOS
28. Were you assigned to a MEDSOM? □ Yes □ No (If the answer is yes, skip to #34.)

29. Did your section fabricate lenses and/or inserts? □ Yes □ No (If the answer is no, skip to #36.)

30. What types of lenses and or inserts did your section fabricate?
□ S-9s □ BLPSs □ PMIs □ Other (specify) ________________

31. About how many pairs of each type did your section fabricate per week?
____S-9s _____BLPSs _____PMIs _____Other (specify) ____

32. What approximate percentage of the overall spectacle and insert Rxs that you wrote, did your section fabricate?
____S-9s _____BLPSs _____PMIs _____Other (specify) ____

33. What was the approximate average turn around time (in days) for spectacles and inserts that your section fabricated?
_______S-9s _____BLPSs _____PMIs Other (specify) ____

34. If you were assigned to a MEDSOM, what was the total number of each of the following lenses and inserts that you fabricated?
_________________________S-9s ______________BLPSs ___________PMIs
Other (specify)______________________________

35. If you were assigned to a MEDSOM, what was the approximate turn around time (in days) for the lenses and inserts that your section fabricated?
_______S-9s _____BLPSs _____PMIs Other (specify) ____
36. **Check** the medications you prescribed during your ODS tour. **Indicate** whether they were given topically, by injection or orally by placing the letter 'T'=topical, 'I'= injectable or 'O'= orally after each category below.

- ☐ antibiotics
- ☐ antifungals
- ☐ antivirals
- ☐ steroids
- ☐ non steroidal anti-inflammatory
- ☐ decongestants
- ☐ artificial tears
- ☐ other ocular lubricants
- ☐ glaucoma
- ☐ analgesics
- ☐ local anesthetics
- ☐ other (specify)

37. Were you able to prescribe all the medications needed to treat your patients during ODS? ☐ Yes ☐ No (If yes, skip to #39.)

38. If the answer to #37 was no, **list** the medications that you wanted to prescribe but couldn't and **state** the reason why, e.g., division surgeon did not allow me to prescribe steroids; couldn't obtain antivirals, or other (be specific).

39. Did you prescribe medications during your ODS tour that you didn't prescribe at your pre ODS assignment location? ☐ Yes ☐ No (If the answer is no, skip to #50.)

40. Did you prescribe medications during your ODS tour for which you weren't clinically privileged to prescribe at your pre ODS assignment location? ☐ Yes ☐ No (If the answer is no, skip to #42.)

41. **Check** which types of medications below that you prescribed during ODS, for which you weren't clinically privileged to prescribe prior to ODS. **Indicate** whether they were given topically, by injection or orally by placing the letter 'T'=topical, 'I'= injectable or 'O'=orally after each category below.

- ☐ antibiotics
- ☐ antifungals
- ☐ antivirals
- ☐ steroids
- ☐ non steroidal anti-inflammatory
- ☐ decongestants
- ☐ artificial tears
- ☐ other ocular lubricants
- ☐ glaucoma
- ☐ analgesics
- ☐ local anesthetics
- ☐ other (specify)
42. Did you prescribe medications during your ODS tour that you
chose not to prescribe at your pre ODS assignment location?
☐ Yes  ☐ No (If the answer is no, skip to #44.)

43. Check which types of medications below that you prescribed
during ODS, that you chose not to prescribe prior to ODS. Indicate
whether they were given topically, by injection or orally by placing
the letter 'T'=topical, 'I'= injectable or 'O'=orally after each category
below.

☐ antibiotics  ☐ antifungals  ☐ antivirals  ☐ steroids
☐ non steroidal anti-inflammatory  ☐ decongestants
☐ artificial tears  ☐ other ocular lubricants  ☐ glaucoma
☐ analgesics  ☐ local anesthetics  ☐ other (specify)

44. If you prescribed medications during ODS that you didn't prior
to ODS check one of the following reasons why.
☐ was given broader clinical privileges during ODS
☐ felt it was my duty
☐ had no choice, i.e., was told to do it
☐ other (specify)

45. If you prescribed medications during ODS that you didn’t prior to
ODS and you are now prescribing, plan to prescribe, or plan to
request to prescribe medications beyond what you prescribed prior
to ODS, check why.

☐ feel more confident in my clinical abilities
☐ feel that I have an obligation to perform as full of a scope
of practice as possible
☐ other (specify)

46. If you did prescribe medications during ODS that you didn’t prior
to ODS and you are not currently prescribing medications or don’t
plan to expand the medications that you can prescribe beyond what
you prescribed prior to ODS, check why.

☐ can prescribe the medications needed at pre ODS site
☐ lack the clinical knowledge
☐ lack the clinical confidence
☐ current patient conditions don't require the type of
medications that were needed during ODS
☐ other (specify)
47. If you prescribed medications during ODS that you didn’t prior to ODS, and you have returned to your pre ODS assignment location, then please check Yes or No for one of the following statements.

I have expanded the types of medications that I can prescribe beyond what I was clinically privileged or chose not to prescribe prior to ODS. □ Yes □ No (If yes, skip to #48.)

I plan to request to expand the types of medications that I can prescribe beyond what I was clinically privileged or chose not to prescribe prior to ODS. □ Yes □ No (If yes, skip to #49.)

I plan to expand the types of medications that I can prescribe beyond what I was clinically privileged or chose not to prescribe prior to ODS. □ Yes □ No (If yes, skip to #49.)

48. If your answer in #47 was that you have expanded the medications that you now can prescribe, check what new types of medications that you are now prescribing. Indicate whether they were given topically, by injection or orally by placing the letter 'T'=topical, 'I'= injectable or 'O'=orally after each category.

☐ antibiotics☐ antifungals☐ antivirals☐ steroids
☐ non steroidal anti-inflammatory☐ decongestants
☐ artificial tears☐ other ocular lubricants☐ glaucoma
☐ analgesics☐ local anesthetics☐ other (specify)

49. If your answer to #47 was that you plan to or plan to request to expand the medications that you now can prescribe, check what new types of medications that you plan to or plan to request to prescribe. Indicate whether they were given topically, by injection or orally by placing the letter 'T'=topical, 'I'= injectable or 'O'=orally after each category.

☐ antibiotics☐ antifungals☐ antivirals☐ steroids
☐ non steroidal anti-inflammatory☐ decongestants
☐ artificial tears☐ other ocular lubricants☐ glaucoma
☐ analgesics☐ local anesthetics☐ other (specify)
50. If you prescribed no new medications during ODS that you hadn't prescribed prior to ODS, have you expanded or do you plan to expand the medications beyond what you prescribed prior to ODS?
☐ Yes ☐ No

51. Check the procedures you performed during ODS and specify procedures, other than routine refractive procedures, not mentioned below.
☐ foreign body removal
☐ corneal debridement
☐ chalazion injection
☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) ____________
☐ other (specify) ____________________________________

52. Were you able to perform all the procedures needed to diagnose and treat your patients during ODS?
☐ Yes ☐ No (If yes, skip to #54.)

53. If the answer to #52 was no, list the procedures that you wanted to perform but couldn’t, and state the reason why, e.g., division surgeon did not allow me to perform corneal debridement; couldn’t obtain a binocular indirect ophthalmoscope; or other (be specific).

54. Did you perform procedures during your ODS tour that you didn’t perform at your pre ODS assignment location?
☐ Yes ☐ No (If the answer is no, skip to #65.)

55. Did you perform procedures during your ODS tour for which you weren't clinically privileged to perform at your pre ODS assignment location?
☐ Yes ☐ No (If the answer is no, skip to #57.)

56. Check what types of procedures below that you performed during ODS for which you weren't clinically privileged to perform prior to ODS.
☐ foreign body removal ☐ corneal debridement
☐ chalazion injection ☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) ____________
☐ other (specify) ____________________________________
50. If you prescribed no new medications during ODS that you hadn’t prescribed prior to ODS, have you expanded or do you plan to expand the medications beyond what you prescribed prior to ODS?
☐ Yes  ☐ No

51. **Check** the procedures you performed during ODS and specify procedures, other than routine refractive procedures, not mentioned below.
☐ foreign body removal
☐ corneal debridement
☐ chalazion injection
☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) ___________
☐ other (specify) ______________________________________

52. Were you able to perform all the procedures needed to diagnose and treat your patients during ODS?
☐ Yes  ☐ No  (If yes, skip to #54.)

53. If the answer to #52 was no, **list** the procedures that you wanted to perform but couldn’t, and **state** the reason why, e.g., division surgeon did not allow me to perform corneal debridement; couldn’t obtain a binocular indirect ophthalmoscope; or other (be specific).

54. Did you perform procedures during your ODS tour that you didn’t perform at your pre ODS assignment location?
☐ Yes  ☐ No  (If the answer is no, skip to #65.)

55. Did you perform procedures during your ODS tour for which you weren’t clinically privileged to perform at your pre ODS assignment location?
☐ Yes  ☐ No  (If the answer is no, skip to #57.)

56. **Check** what types of procedures below that you performed during ODS for which you weren't clinically privileged to perform prior to ODS.
☐ foreign body removal  ☐ corneal debridement
☐ chalazion injection  ☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) ___________
☐ other (specify) ______________________________________
57. Did you perform procedures during your ODS tour that you chose not to perform at your pre ODS assignment location?
☐ Yes ☐ No (If the answer is no, skip to #59.)

58. Check what types of procedures below that you performed during ODS that you chose not to perform prior to ODS.
☐ foreign body removal ☐ corneal debridement
☐ chalazion injection ☐ chalazion incision and drainage
☐ suturing (specify the anatomical structure) ☐ other (specify)

59. If you performed procedures during ODS that you didn't prior to ODS then check one of the following reasons why.
☐ was given broader clinical privileges during ODS
☐ felt it was my duty
☐ had no choice, i.e., was told to do it
☐ other (specify)

60. If you performed procedures during ODS that you didn't prior to ODS and you are now performing, plan to perform, or plan to request to perform procedures beyond what you performed prior to ODS, check why.
☐ feel more confident in my clinical abilities
☐ feel that I have an obligation to perform as full of a scope of practice as possible
☐ other (specify)

61. If you did perform procedures during ODS that you didn't prior to ODS and you are not currently performing procedures or don't plan to expand the procedures that you can perform beyond what you performed prior to ODS, check why.
☐ can perform the procedures needed at pre ODS site
☐ lack the clinical knowledge
☐ lack the clinical confidence
☐ current patient conditions don't require the type of procedures that were needed during ODS
☐ other (specify)
62. If you performed procedures during ODS that you didn't prior to ODS, and you have returned to your pre ODS assignment location, then please check Yes or No for one of the following statements.
I have expanded the types of procedures that I can perform beyond what I was clinically privileged or chose not to perform prior to ODS. □ Yes □ No (If yes, skip to #63.)

I plan to request to expand the types of procedures that I can perform beyond what I was clinically privileged or chose not to perform prior to ODS. □ Yes □ No (If yes, skip to #64.)

I plan to expand the types of procedures that I can perform beyond what I was clinically privileged or chose not to perform prior to ODS. □ Yes □ No (If yes, skip to #64.)

63. If your answer to #62 was that you have expanded the procedures that you now can perform, check what new types of procedures you are now performing.
- foreign body removal
- corneal debridement
- chalazion injection
- chalazion incision and drainage
- suturing (specify the anatomical structure)
- other (specify)

64. If your answer to #62 was that you plan to or plan to request to expand the procedures that you now can perform, check what new types of procedures that you plan to or plan to request to perform.
- foreign body removal
- corneal debridement
- chalazion injection
- chalazion incision and drainage
- suturing (specify the anatomical structure)
- other (specify)

65. If you performed no new procedures during ODS that you hadn't performed prior to ODS, have you expanded or do you plan to expand the procedures beyond what you performed prior to ODS?
- Yes □ No

66. Check the patient conditions other than routine refractive conditions that you treated during ODS.
- suspected laser/radio frequency radiation injuries
- ocular embedded foreign bodies □ iritis □ corneal ulcers
- conjunctivitis □ other (specify)
67. Were you able to treat all the patient conditions presented to you that you wanted to treat during ODS? □ Yes □ No (If yes, skip to #69.)

68. If the answer to #67 was no, list the patient conditions that you wanted to treat but couldn’t and state the reason why, e.g., division surgeon did not allow me to treat suspected ocular laser injuries; or other (be specific).

69. Did you treat patient conditions during your ODS tour that you didn’t treat at your pre ODS assignment location? □ Yes □ No (If the answer is no, skip to #80.)

70. Did you treat patient conditions during your ODS tour for which you weren’t clinically privileged to treat at your pre ODS assignment location? □ Yes □ No (If the answer is no, skip to #72.)

71. Check what types of patient conditions below that you treated during ODS for which you weren’t clinically privileged to treat prior to ODS.

☐ suspected laser/radio frequency radiation injuries
☐ ocular embedded foreign bodies
☐ conjunctivitis
☐ iritis
☐ corneal ulcers
☐ other (specify) ____________________________

72. Did you treat patient conditions during your ODS tour that you chose not to treat at your pre ODS assignment location? □ Yes □ No (If the answer is no, skip to #74.)

73. Check what types of patient conditions below that you treated during ODS that you chose not to treat prior to ODS.

☐ suspected laser/radio frequency radiation injuries
☐ ocular embedded foreign bodies
☐ conjunctivitis
☐ iritis
☐ corneal ulcers ☐ other (specify) ____________________________
74. If you treated patient conditions during ODS that you didn’t treat prior to ODS check one of the following reasons why.
☐ was given broader clinical privileges during ODS
☐ felt it was my duty
☐ had no choice, i.e., was told to do it
☐ other (specify) ________________________________

75. If you treated patient conditions during ODS that you didn’t prior to ODS and you are now treating, plan to treat, or plan to request to treat patient conditions beyond what you treated prior to ODS, check why.
☐ feel more confident in my clinical abilities
☐ feel that I have an obligation to perform as full of a scope of practice as possible
☐ other (specify) ________________________________

76. If you did treat patient conditions during ODS that you didn’t prior to ODS and you are not currently treating patient conditions or don’t plan to expand the patient conditions that you can treat beyond what you treated prior to ODS, check why.
☐ can treat the conditions needed at pre ODS site
☐ lack the clinical knowledge
☐ lack the clinical confidence
☐ current patient conditions don’t require the type of treatment that was needed during ODS
☐ other (specify) ________________________________

77. If you treated patient conditions during ODS that you didn’t prior to ODS, and you have returned to your pre ODS assignment location, then please check Yes or No for one of the following statements.

I have expanded the types of patient conditions that I can treat beyond what I was clinically privileged or chose not to treat prior to ODS. ☐ Yes ☐ No (If yes, skip to #78.)

I plan to request to expand the types of patient conditions that I can treat beyond what I was clinically privileged or chose not to treat prior to ODS. ☐ Yes ☐ No (If yes, skip to #79.)

I plan to expand the types of patient conditions that I can treat beyond what I was clinically privileged or chose not to treat prior to ODS. ☐ Yes ☐ No (If yes, skip to #79.)
78. If your answer to #77 was that you have expanded the patient conditions that you now can treat, check what new types of patient conditions you are now treating.
- suspected laser/radio frequency radiation injuries
- embedded foreign bodies
- iritis
- corneal ulcers
- other (specify) ____________________________________________

79. If your answer to #77 was that you plan to or plan to request to expand the patient conditions that you now can treat, check what new types of patient conditions that you plan to or plan to request to treat.
- suspected laser/radio frequency radiation injuries
- embedded foreign bodies
- iritis
- corneal ulcers
- other (specify) ____________________________________________

80. If you treated no new patient conditions during ODS that you hadn’t treated prior to ODS, have you expanded or do you plan to expand the patient conditions beyond what you treated prior to ODS?
- Yes
- No

81. Check the clinical support/coverage other than your normal optometric responsibilities that was expected of you.
- advanced trauma life support care
- other (specify) ____________________________________________

82. Check the procedures other than your normal optometric procedures that you actually performed.
- advanced trauma life support care
- other (specify) ____________________________________________

83. If you supported a division, did the division deploy smaller sized units in multiple locations e.g., brigade slices? 
- Yes
- No
- didn’t support a division (If you answered no or didn’t support a division, skip to #85.)

84. If smaller units were deployed, how did you provide optometric care for the personnel deployed away from your immediate area which were unable to travel to your location?
- I traveled to their location on the following basis;
  - weekly
  - monthly
  - other (please specify). __________
- All the supported personnel traveled to my location.
- Other (specify) ____________________________________________
85. How long did it take most personnel seeking treatment to reach your location? ______(minutes); the shortest time____(min.); and longest time____(minutes). What percentage of the personnel traveled more than an hour? ______% 

86. How far from your location was the nearest ophthalmologist located? ______miles 

87. Did you communicate with the ophthalmologist to which you referred patients? □ Yes □ No (If yes, skip to #89.) 

88. If the answer to #87 was no, list the type of patient conditions you referred. 

89. If the answer to #89 was yes, answer the following questions. 

□ I communicated prior to evacuating the patient. (specify type of patient conditions) ____________________________

□ I communicated while co-managing a patient. (specify type of patient conditions) ____________________________

□ I communicated on a frequent basis about general topics. (specify frequency, e.g. weekly, etc.) ____________________________

90. How long did it take to contact the ophthalmologist? ______ minutes 

91. How far did you have to travel to gain access to a communication device to contact the ophthalmologist? ____________________________ (specify, feet or miles) 

92. What type of communication device did you use to contact the ophthalmologist? ____________________________

93. How long did it take the evacuated patient to travel from your location to the ophthalmologist's location? ______ minutes 

94. What were the medical/dental specialities of other health care providers in your immediate area? 

□ dentists 

□ physicians, specify specialties ____________________________

□ registered nurses 

□ physician assistants 

□ other (specify) ____________________________
95. Did you deploy with an optometry field set (OFS)? □ Yes □ No
(If no, skip to #97.)

96. If you did deploy with a OFS, was it the 1990 version?
□ Yes □ No

97. If you didn’t deploy with an OFS, how long after you arrived in country did you receive an OFS? _______ days

98. What equipment/supplies in addition to the OFS do you feel would have enabled you to better perform your mission?

□ binocular indirect ophthalmoscope
□ hand held tonometer
□ book reference set
□ foreign body removal instruments
□ medications
□ other (specify)  ____________________________________________

__________________________________________________________
99. How many optometrists per your section (division, hospital or MEDSOM) do you feel were needed to perform your assigned mission? _____

100. What were the biggest optometric and non-optometric problems you faced prior to, during, and after deployment?

Prior:

During:

After:

101. List your optometric/ophthalmic and other preparation recommendations for future conflicts? Include recommended solutions to the problems you listed in #100. Use additional paper if needed.
102. Do you think that completion of an Optometric Residency Training Program would have better prepared you for your mission? 
☐ Yes  ☐ No  If yes, list what type e.g., primary care, and in what ways?  If no, why not?

103. Complete the attached table.

104. Feel free to add additional comments below and on a continuation sheet of paper if necessary.

THANKS

____________________   ____________________   ____________________
NAME/RANK               UNIT                   DATE
<table>
<thead>
<tr>
<th>TYPE OF PATIENT ENCOUNTER</th>
<th>DID YOU TREAT (YES OR NO)</th>
<th>APPROXIMATE % OF OVERALL PATIENTS SEEN</th>
<th>APPROX % RTD IMMEDIATELY AFTER YOUR TX</th>
<th>APPROXIMATE % RETURNED TO DUTY W/IN 72 hrs</th>
<th>APPROXIMATE % EVACUATED TO OPHTHALMOLOGIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFRACTIVE DISORDERS</td>
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<tr>
<td>OCULAR FOREIGN BODIES</td>
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APPENDIX D

RESIDENCY DIRECTOR'S QUESTIONNAIRE
Dear Residency Director,

I am a graduate student enrolled in the Masters program at Pacific University College of Optometry. I have served in the U.S Army, since graduating from the University of Houston’s Optometry school in 1983. My thesis project consists of documenting the needs and benefits of having residency trained Army optometrists. My goal is to provide the Army’s Surgeon General with information which will cause him to approve residency training for Army optometrists.

I would appreciate it if you would send me information such as job descriptions about your residency programs. I am interested in both in-house and affiliated programs such as the Veterans Administration? It would also be helpful if you provide specific answers to the following questions? Your assistance will help support my thesis, as well as, aid the the Army in selecting the most appropriate residency programs for future attendance.

1. What clinical skills/procedures, knowledge and experiences does each of your residency programs offer that are not provided in your O.D. curriculum?

2. What clinical skills/procedures, are your residency trained optometrists performing which they might not have if they had not completed your program?

3. What types of patient conditions are your residency trained optometrists treating which they might not have if they had not completed your program?

4. Being as specific as possible, how have application rates for your residency programs changed since their start? Be as specific as possible on the rate of change.
5. In your opinion, why aren't more optometrists entering residency programs?

6. List the advantages of having residency trained optometrists.

7. Make any other comments that support the needs and benefits of having residency trained optometrists.

8. If you could have military optometrists enrolled in your residency programs at no extra costs, i.e., no stipend paid by your school, would you consider expanding the number of available positions in your residency programs?

Thank you in advance for your assistance. I look forward to hearing from you.

Sincerely yours,

Francis L. McVeigh II
3352 Lavina Dr.
Forest Grove, Or., 97116
August 16, 1991

Dr. Mullen,

I am an Army optometrist currently working on my masters degree at Pacific University College of Optometry. My thesis project deals with justifying the needs and benefits of having residency trained Army optometrists.

Recently I sent letters to the residency directors of the U.S. schools and colleges asking them questions about their residency training programs (see inclosure 1). Dr. Reinke, one of my thesis advisors, suggested that I contact you in order to obtain specific information about your residency programs.

My main question for you is, 'If the Army approves residency training for Army optometrists, would your VA residency program directors be willing to expand the current number of residency positions to train Army optometrists?' We are probably looking at three to five per year. The Army optometrists would be on active duty and would not require a stipend.

In addition to answering the above question feel free to comment on any of the questions enclosed in the letter I sent the optometry schools and colleges. Furthermore I would greatly appreciate any information you have on your existing and planned residency training programs.

Thank you in advance. I realize that the VA optometrists have led the way in residency training programs and will continue to do so in the future. By the way, Dr. Bill Jones, a VA optometrist, also serves as one of my advisors.

Francis L. McVeigh II, O.D.
MAJ, MS
Graduate Student
APPENDIX E

DEPARTMENT OF THE ARMY:
CHAMPUS OPHTHALMOLOGIST REFERRAL COST INFORMATION
MEMORANDUM FOR: COL Thomas Gray  
SUBJECT: Request for HSC (DCSRM) tasker

One of my officers, MAJ McVeigh, is working on a project for me while he is attending long term civilian training. He is trying to gather information that will hopefully support the need and benefits of sending Army optometrists to residency training programs.

MAJ McVeigh has unsuccessfully tried to obtain information on the amount of monies spent in support of ophthalmological care and the number of episodes for which these monies paid for this last fiscal year, i.e., how much money was spent for referrals by Army medical treatment facilities to send patients to civilian ophthalmologists, and if possible for what specific condition were they sent.

MAJ McVeigh was advised that the best way to obtain this information was to have your office task the HSC Resource Management Division. He has narrowed his request to the following installations: Fts. Mc Clellan, Wainwright, Ord, Irwin, Stewart, Mc Pherson, Campbell, Knox, Polk, Leonard Wood, Drum, Carlisle Barracks, Hood and Eustis.

Your advice and assistance in obtaining this information is appreciated. If possible I would like the data NLT 15 Oct 91. POC is MAJ Fran McVeigh, (503) 357-0608.

John F. Pyle  
Colonel, MS  
Chief, Army Optometry
**SOURCE: OCHAMPUS HEALTH CARE SUMMARY REPORTS**  
**FOR SERVICES PROVIDED FROM 10/01/89 TO 09/30/90**  
**15 MONTH DATA COLLECTION PERIOD**  
**CATEGORY OF CARE: OPHTHALMOLOGY**

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**CARLISLE BARRACKS** CHAMPUS data is not segregated for this service  
**FT. DRUM** CHAMPUS data is not segregated for this service

The above data from source reports is considered only 90% complete.  
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09/05/91 OPTHAL.WQ1
APPENDIX F

RESIDENCY TRAINED OPTOMETRIST REFERRAL INFORMATION
MEMORANDUM FOR MAJ FRANCIS L. MCVEIGH II

SUBJECT: Cost Effectiveness Regarding Residency Training in Optometry

1. The acquisition of a residency trained optometrist to Redstone Arsenal has significantly increased the quality and quantity of eye care being delivered.

2. Patient numbers have increased 71.4% (approximately 2,000 patients per year) with no additional manpower. Specifically, the increase was from 2,800 to 4,800 clinic visits.

3. A substantial reduction of outside referrals have resulted. Prior to the arrival of a residency trained optometrist, the Optometry Service referred approximately 700 to 840 patients (25-30%) annually. Currently, outside referrals average 72 to 96 patients (1.5-2%) in the same time frame.

4. Actual dollar amounts of savings are impossible to tabulate. An estimation utilizing $70.00 average cost per patient visit have resulted in an approximate reduction of outside expenditures ranging from $43,960.00 to 52,080.00 dollars annually.

5. Cost savings listed above reflects not only savings to the military but also to patients who otherwise may not have afforded this necessary care.

DAVID K. TALLEY
CPT, MS
Chief, Optometry Clinic