Pre-Deployment Training Recommendations for Special Forces Medical Sergeants Based On Recent Operation Enduring Freedom Experiences

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ABSTRACT

Retrospective analysis of patient records from two 1st Battalion, 7th Special Forces Group combat rotations in Operation Enduring Freedom reveals a high volume of medical activity over a wide range of medical issues managed by Special Forces Medical Sergeants (MOS 18Ds). The initial training curriculum for 18Ds has been modified to provide graduating 18Ds with a refresher course and updated credentialing before reporting to their first unit. However, due to the high operational tempo, subsequent biannual refresher training has proven difficult for at least one Special Forces unit. Units must plan ahead between deployments to balance medic recredentialing with unit pre-mission training and individual non-medical training.

Introduction

Special Forces Medical Sergeants undergo extensive medical training at the Joint Special Operations Medical Training Center (JSOMTC) at Fort Bragg, NC.¹ After being selected for Special Forces training and proving their aptitude to become an 18D, selectees undergo extensive trauma and basic medicine, pharmacology, veterinary, dental, preventive medicine, and medical technology training. Then, upon graduation from the overall Special Forces course, they are typically assigned as medics to Special Forces Operational Detachments where they are able to build and operate unconventional warfare clinics, train foreign military medics, treat military and civilian animals, perform basic dentistry, and manage complex trauma patients for prolonged periods under austere conditions. In addition to this, they are expected to maintain their nonmedical Special Forces skills through training and attending schools for intelligence, scuba diving, high altitude low opening parachuting, sniping, and a variety of other skills.

The heightened operational tempo has affected all Special Forces units, putting them into deployment cycles where they spend time deployed in combat zones followed by time in garrison preparing for the next rotation. Often the "dwell time" is six months or

less. This means that new 18Ds arrive to an Operational Detachment and have very little, if any, time to learn the ropes and prepare for war. With this deployment cycle, the newly trained medics may even report to a unit at war and meet their Operational Detachment at a remote outpost in a combat zone. While this situation is similar for many military occupational specialties (MOS), the time between deployments is compressed and there is much competition for the Special Forces Soldier's time. They have to redeploy, perform various equipment inventories, restore unit medical readiness, perform parachute jumps, maintain demolition proficiency, go on leave, order and prepare equipment for the next rotation, perform Pre-Deployment Site Surveys, perform mission analysis, and deploy for the next combat rotation. Additionally, the 18D MOS requires continued credentialing training via attendance at the Special Operations Combat Medical Skills Sustainment Course (SOCMSSC), a two-week course every two years;2 the Non-Trauma Module (NTM), a two-day course every two years; and Medical Proficiency Training (MPT), clinical training for two to four weeks every two to four years.³ On paper this seems simple, but it becomes complex when it must compete with all of the other Special Forces tasks in the contemporary expeditionary force.

Of critical note is that, while deployed, the 18Ds are often the only medical personnel in their remote firebase locations, limiting their available supervision. Therefore, it is essential that they maintain their extensive medical skills to be able to contribute as Special Forces medics.

OPERATIONAL MEDICAL DATA

The following data is a compilation of medical information from 1st Battalion, 7th Special Forces Group's two consecutive combat rotations in Operation Enduring Freedom X (2007) and Operation Enduring Freedom XII (2008-2009). The data was transcribed from in-theater medical notes (SF600s) written by 18Ds and SOCM medics, documenting patient encounters in which they used controlled medications. These SF600s were reviewed and co-signed by the Battalion Surgeon or Physician Assistant at the end of each rotation, for both clinical quality control and to account for all issued controlled substances. Some patients received multiple prescriptions if they had severe, complex, or

Table 4: Patient Issues					
Patient Issue	OEF X	OEF XII	Total		
Fracture	23	147	170		
Gunshot wound	47	51	98		
Shrapnel wounds	60	51	111		
Lacerations	11	20	31		
Seizures	0	7	7		
Amputations	15	11	26		
Dental Issues	15	36	51		
Burns	24	25	49		
Dislocations	10	13	23		
Kidney Stones	5	5	10		
Scorpion Stings	5	5	10		
Snake bites	1	1	2		

Table 5: Medica	Interventions		
Intervention	OEF X	OEF XII	Total
Tourniquet	22	16	38
Debridement	68	66	134
Dental extractions	15	36	51
Reductions	10	13	23
Chest Tubes	7	4	11

Table 1: Medication Prescriptions					
Medication prescriptions	OEF X	OEF XII	Total Used	% of Total	
Total prescriptions	1374	767	2141	100%	
Morphine IM	46	119	165	7.7%	
Morphine IV	53	5	58	2.7%	
Fentanyl 400mcg	47	0	47	2.2%	
Fentanyl 800mcg	0	68	68	3.1%	
Ambien	932	214	1146	53.5%	
Lunesta	0	16	16	0.7%	
Percocet	108	120	228	10.6%	
Diazepam	67	203	270	12.6%	
Versed	23	18	41	1.9%	
Tramadol	0	3	3	0.1%	
Tylenol w/Codeine	9	10	19	0.9%	
Nubain	56	56	112	5.2%	
Ketamine	22	17	39	1.8%	

Table 2: Demographics of Patients Treated				- e-
Demographic	OEF X	OEF XII	Total	% of Total
U.S. patients	992	306	1298	60.6%
Afghan Patients	379	440	819	38.2%
Coalition Patients	6	14	20	0.9%
Male Patients	1359	748	2107	98.4%
Female Patients	15	19	34	1.5%
Patients under age 18	35	50	85	3.9%
Animals	1	7	8	0.4%

Table 3: Demographics of Special Operations Medics				
Demographic	OEF X	OEF XII	Total	% of Total
Prescriptions by 18D	1296	764	2060	96.2%
Prescriptions by SOCM	81	3	84	3.8%

prolonged medical conditions. The inherent value of the SF600s is that they capture vast quantities of medical information on over two thousand patient encounters.

The 1st Battalion, 7th Special Forces Group medics saw well over 50,000 patients during the two combat rotations, but the only data utilized were for the 2,141 patients who were prescribed controlled substances by the 18Ds or other Special Operations Combat Medics (SOCMs).

IMPLICATIONS OF OPERATIONAL MEDICAL DATA

Table 1 shows some variations in quantities of controlled substances used in OEF X and in OEF XII. This is most likely due to the evolving injury patterns, prescriber preferences, and turnover of medics between combat rotations. Table 3 shows that most controlled substances were prescribed by 18Ds *versus* SOCM medics, which is to be expected due to the large numbers of 18Ds and small number of attached SOCM medics in a Special Forces task force. Tables 4 and 5 show the breadth of injuries and interventions.

The data clearly shows that 18Ds see a wide variety of trauma and non-trauma issues while deployed. Most of these were handled with minimal on-line medical control. Over two thousand controlled substance prescriptions were used with no adverse effects. This shows that the JSOMTC curriculum is helping to produce well-trained medics for the Operational Detachments.

However, the timing of the training for these high-demand medics has needed improvement. The frequency of and short time between deployments severely limits the amount of time that groups and battalions have to complete new 18D training. Ideally, an 18D should present to his unit ready and able to handle a wide range of patient complaints without relying on a senior medic's close guidance. During both rotations, the vast majority of the assistance from the Battalion Surgeon and Physician Assistant went to the newest medics, many of whom arrived just before or during the deployment. The 18Ds demonstrated understanding of the skills and information taught at JSOMTC. However, the year of non-medical training between JSOMTC and reporting to an Operational Detachment dulled their skills and often necessitated on-the-job refresher training. Further, new 18Ds often arrived at their first units lacking field medical expertise. Little time exists in the operational timeline to provide extensive additional training for new medics. Additionally, little time is available to provide sustainment training between deployments.

In the past few months, JSOMTC has modified its curriculum to add a refresher and recredentialing course at the latter portion of the training, which should address this issue. Additionally, JSOMTC modified the curriculum so that the medic specific training is done in the second half of the 18D training plan so there is very little break between the end of medical training and reporting to the first duty assignment. Due to the large volume of students passing through and the complexity of the issue, some lag time of a few months will occur before students taking the refresher courses begin to show up at units. At printing 1st Battalion, 7th Special Forces Group had not yet received the newer medics, but the battalion's combat experience highlights the wisdom of this change.

DISCUSSION OF 18D TRAINING

While 18D medics are better trained than they ever have been, as the OEF data shows, a wide variety of medical expertise is expected of 18Ds for combat deployments. To this end, the following are some areas that units should focus on for pre-mission train-up before deployments.

Non-Trauma Module: Due to the high optempo and finite resources in garrison, it can frequently be difficult to

ensure that all medics are current in NTM before deployment. Some creativity is often required to line up the resources to conduct an NTM that fits in with the pre-mission training and individual training cycles. The OEF experiences of the battalion highlight the importance of accomplishing this training before deploying. A good portion of the patients treated involved dentistry for local nationals, physical therapy for U.S. and coalition Soldiers, and veterinary care for local national livestock. To augment NTM training, the battalion also rotated the group veterinarian, dentist, and physical therapist to firebases to teach medics and augment care to local nationals. Practices similar to this model may prove critical to the advancement of 18D in-theater skill sets. (Editor's Note: this is also an excellent way for medical supervisors to learn "ground truth" regarding medical logistic issues, what kind of patients their subordinates are seeing, and what kind of additional medical training is desirable.)

Train medics on proprietary medical devices before

deployments: Due to rapidly evolving medical techniques and devices and limited training modules at JSOMTC, 18Ds new to the battalion frequently arrived deficient in knowledge of specific intraosseous devices and techniques (EZ-IOTM, B.I.GTM, FAST-1TM), hemostatic agents (CeloxTM, Combat GauzeTM), oral and parental narcotics, antibiotics, and techniques for packing aid bags and vehicles for combat operations. In the current arena, the difference between a senior and junior 18D on a detachment is sometimes defined by the senior 18D arriving on station one month prior to the junior 18D. Based on this, 18Ds need to arrive to their units trained on the equipment currently being used in the field to increase their functioning from the first day. JSOMTC has recently added some exposure to a few of the medical devices widely used in theater, so that the newly trained medics should soon begin arriving to their units armed with this knowledge. Pre-exposure to these devices proved beneficial to medics going through the 18D course and SOCMSSC. However, with ongoing rapid advances and fielding of new equipment, battalions should incor-

Add topics to pre-mission training: The data from Afghanistan shows that the medics are likely to see scorpion bites, snake bites, and severe burns (in local nationals) that cannot be evacuated. Consequently, they require lectures on medical threats in the most likely countries to which they will deploy. Additionally, they would benefit from training on complex burn management that they may be forced to use in the absence of a forward surgical

porate hands-on training with the newest medical devices

in their pre-mission training plans.

team or combat support hospital that may have skin grafting equipment.

CREDENTIALING ISSUES FOR 18DS

The 18Ds and SOCMs are instilled with incredible ability by JSOMTC. Their extensive skill set is refreshed every two years via instruction. However, when they return to their home station, they are limited in what they are allowed to do by Army medical credentialing regulations. Army Regulation (AR) 40-68 *Clinical Quality Management*, specifies that "the 18D is a nonmedical MOS." They are permitted to perform patient care within their skill set as long as they are directly supervised by a privileged provider. This means being in the same building as a physician or physician assistant and seeing patients with the direct knowledge of the supervisor.

Two weeks of sustainment training every other year with two weeks of clinical patient care does not appear to be sufficient to maintain their extensive skill set. The author recommends that AR 40-68 be revised to allow 18Ds to perform at least limited healthcare for their unit members in a minimally supervised capacity and to be able, at least in a limited way, to prescribe medications when at their home station during times of war. The exact method of achieving this is undefined at present as it will be difficult to determine and grant their credentialing status and electronic access to order medications. However, the benefit of providing at least limited home station credentialing is to allow them to practice medicine independently to continually hone their skills and accrue confidence. One solution may be to provide the medics autonomy to prescribe from a centrally funded pharmacy based on the Joint Special Operations Tactical Medical Emergency Protocol (TMEP) and Drug List.5

When the nation is not at war, 18Ds may have sufficient time to train and there may be fewer demands on their time in-garrison. However, as previously described, the increased operation tempo places such high demands on their time that allowing them increased medical practice in garrison may prove to enhance their medical readiness for deployments. (Editor's Note: The U.S. Navy seems to have effectively dealt with this very same issues with their IDCs – Independent Duty Corpsmen – by credentialing them with their local hospital, giving CHCS access and privileges, etc. Further information on their regulations can be found by entering "OPNAVINST 6400.1C, MCO 6400.1" into your search engine. The latest instructions I've found concerning their scope of practice issues are dated 15 AUG 07.)

SUMMARY

Deployments are complex and challenging for 18D medics. In general, these medics perform well and are receiving sufficient foundational training. To enhance their readiness to practice nearly independently in theater, units should incorporate training on the newest medical devices and on the most recent theater specific topics before deploying to set medics up for the greatest chances of success.

REFERENCES

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