Dental Command and Control During Operation Desert Shield and Desert Storm

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The author describes the first ever wartime deployment of an AI detachment for command and control of dental units during Operation Desert Shield and Desert Storm. The purpose of this article is to provide an overview of the doctrine for levels of dental support in a theater of operations and to focus on the lessons learned during both phases of the war.

Doctrine[1]

Dental support in a theater of operations is provided by dental personnel assigned to combat units, hospitals and area dental detachments. It is organized to provide effective dental care since the practice of dentistry in the field environment requires the same skills and standards of practice as would be used in any garrison dental clinic. The mission of dental support in a theater of operations is to conserve the oral health of the command by preventing oral disease, promoting dental health and providing treatment to eliminate or reduce the effect of dental disease and injury.

The three levels of dental support in the theater of operations are:

a. **Unit level dental support:** Unit level dental personnel are assigned to divisions, separate brigades and special forces organizations and have the primary mission of providing emergency dental care and preventive dentistry measures. It is important to stress that unit dental support has inadequate dental personnel to provide routine care to all members of the units which they support.

b. **Hospital dental support:** Hospital dental support personnel are organic to hospitals (Evacuation, General, Field, Combat Support, etc), and treatment is limited to inpatients and hospital staff. Normally, maxillofacial injuries are treated by assigned oral surgeons, and comprehensive restorative dentistry is provided by general dentists.

c. **Area support dental units:** Area support dental units are designed to provide dental treatment to all troops within a particular geographic area of responsibility. Area dental support represents the majority of the dental capability within the theater of operations. Finally, it should be stressed that area dental support is provided by an HA, dental service detachment, with the capability to provide emergency and routine dental treatment on an area basis for 20,000 troops in a theater of operations. Fifteen dental officers are assigned to each HA detachment. Both unit level and hospital dental support are provided by dental personnel assigned to a medical unit. Area dental support represents the largest treatment capability within the theater of operations, and the HA detachment is an independent dental unit with a dentist as commander. These detachments are not self-sufficient and must be supported with food, maintenance and administrative services. This support is normally provided by other medical units.

Dental command and control is provided by an AI detachment. A single AI detachment has the capability to command and control four to eight HA detachments. Normally, the AI is assigned to a medical brigade in the combat zone and to a medical command in the communications zone.

TOE dental staff officers are assigned to medical commands, hospital centers, and medical brigades. In the absence of an AI detachment in a MEDCOM, the medical command dental surgeon would normally exercise operational control over the area dental support in the command.

Operation Desert Shield/Storm

On Aug 2, 1990, the Iraqi forces of President Saddam Hussein invaded Kuwait and immediately gained control of that country. President Bush responded with the deployment of US forces under the command of General Norman Schwarzkopf, Commander in Chief of US Central Command, to Saudi Arabia on Aug 7, 1990 as Operation Desert Shield began. On Nov 8, 1990 President Bush ordered an additional

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200,000 troops to the Persian Gulf.[2] On Nov 8, 1990, the 2nd Medical Detachment (AI) from Heidelberg, Germany was officially alerted for participation in Operation Desert Shield/Storm in Southwest Asia (SWA). It was to function as the dental command and control detachment for all deployed 7th MEDCOM dental units. In addition to the 2nd Medical Detachment, three subordinate medical detachments (HA) were alerted for deployment to Southwest Asia (SWA) for participation in Operation Desert Shield/Storm:

a. 87th Med Det (HA) — Nuernberg, Germany

b. 122nd Med Det (HA) — Frankfurt, Germany

c. 123rd Med Det (HA) — Wuerzburg, Germany

2nd Medical Detachment (AI) was responsible for coordinating predeployment operations for the three subordinate detachments (HA), all of which were ALO 3 units. The 2nd Medical Detachment was responsible for ensuring that each subordinate detachment departed Germany with their full complement of equipment and personnel. This necessitated the identification of equipment needs, coordination of the cross-leveling of equipment and personnel with other 7th MEDCOM units, and detailed coordination of the major medical and nonmedical units that stored decrement stocks. The 2nd Medical Detachment (AI) developed and provided TUCHA data to the operations section for all deploying units, standardized load plans, and facilitated movement of the units' equipment by barge, rail and ship to ports of debarkation. Milvans were used for transporting supplies and equipment not loaded on organic unit vehicles. The estimated time of arrival of unit milvans was often underestimated, and the resulting delay in receipt of these supplies and equipment caused problems with the unit's efficiency or capability to perform its mission. After shipment of unit equipment and supplies, the major emphasis shifted to training. The training approach was that all soldiers would benefit from "refresher" training to ensure a minimal level of deployment skills. This included, but was not limited to, the following: weapons familiarization and qualification, noise and light discipline, land navigation, communication in the use of field phones and radios, first aid, field sanitation and NBC skills. Classes were given on how to live in the field, concentrating on 2nd Med's field SOP. This was supplemented by any material that could be collected on SWA. Specific training on heat casualties, water consumption and work-rest patterns were presented. Each dental officer was provided the opportunity to attend one week of intensive NBC training at the Medical Management of Chemical Casualties course sponsored by 7th MEDCOM; this was considered a key alternate wartime role for dental officers. 7th MEDCOM has historically required a yearly field training exercise for each TOE unit with Expert Field Medical Badge training being stressed. This, along with common task training during Sergeant's time, resulted in well-trained soldiers in all units. In addition to its own soldiers, 2nd Medical Detachment was responsible for ensuring its three subordinate detachments were prepared for overseas movement (POM) in a timely manner. Family care plans were established by each unit based on guidance provided by 2nd Medical Detachment (AI).

Once all dental units arrived in SWA, 2nd Medical Detachment was the point of contact for all family support groups back in Germany via its AT&T telephone. The 2nd Medical Detachment deployed to SWA on Dec 11, 1990, arriving on Dec 12, 1990. Prior to the arrival of VII Corps units, the XVIII Airborne Corps was the sole corps in SWA during Operation Desert Shield. Dental support for the XVIII Corps was provided by the 257th Med Det (HA). The 257th Medical Detachment is assigned to the 44th Medical Brigade, an organic unit of XVIII Corps. With the addition of the VII Corps and its four dental units (one AI and three HA's), realignment of dental units was critical. The author, commander of the 2nd Med Det (AI), met with Col Tsoulos, 3rd MEDCOM commander, to discuss his employment plan. Col Tsoulos agreed to the plan to place the 122nd Med Det in Dhahran since this unit had received an entirely new command group within days of its deployment from Germany, and it would be an easier task to move into vacated clinics previously occupied by the 257th Med Det as XVIII Corps moved north toward Iraq. The decision to reassign the 87th Med Det, to VII Corps was based on the fact that this unit had trained with VII Corps units during numerous training exercises to include REFORGER. The commander's immense field dental experience gained during the Vietnam War and the 87th Med Det's high state of training readiness were also factors in this decision. They had also worked closely with the 30th Medical Group and had assigned several division dentists from the Nuernberg DENTAC as P-2 dentists for divisions assigned to VII Corps. The remaining HA, the 123nd Med Det, was assigned to the Riyadh/King Khalid Military City (KKMC) area. This plan established two HA's in Echelons above Corps (EAC), which would backfill Corps dental units with personnel and equipment if needed. The 122nd would backfill the 257th in XVIII Corps and the 123rd would backfill the 87th in VII Corps. Corps units would be responsible for supporting organic divisional dental assets. Upon its arrival in SWA, the 2nd Medical Detachment received each unit and coordinated the emplacement in Dhahran (122nd Med Det), Riyadh, 123rd Med Det), and KKMC (87th Med Det and 123rd Med Det). The 2nd Medical Detachment (AI) was instrumental in the placement of all subordinate dental assets throughout the theater at the beginning of hostilities to ensure adequate area dental support would be available. The 2nd Med Det received its TOE vehicles and equipment on Dec 20,

1990, and the unit departed Dammam Port on Dec 22, 1990 for Riyadh, Saudi Arabia where the unit headquarters was co-located with 3rd Medical Command.

Coordination with the Area Support Group in Riyadh resulted in billeting and messing facilities for 2nd Med personnel at Eskan Village, a Bedouin village on the outskirts of Riyadh. The 2nd Med Det received outstanding support from local finance and personnel offices. In Operation Desert Shield/Storm, the Army was designated as the sole responsible agent for all Class VIII (medical) supplies. Initially, the MEDSOMs had very few dental supplies, so 2nd Med contacted local civilian dental supply houses for assistance in obtaining these supplies. The unit established a Blanket Purchase Account (BPA), which was used to assist all dental assets throughout SWA, without regard for command affiliation. This greatly enhanced the capabilities of the entire dental support system. The 2nd Medical Detachment Milvan was delivered on Jan 31, 1991 and provided needed unit supplies. The 2nd Med Det contracted for two civilian four-wheel-drive vehicles, which greatly improved the ability to locate civilian dental clinics and supply houses and to deliver supplies to subordinate units. Long awaited oral surgery equipment such as Stryker surgical handpieces were delivered to VII Corps and EAC hospitals on the eve of the ground war. Many Dental Corps personnel were transported to area MEDSOMs where they were able to expedite urgent supply requisitions through the system. This insured a level of readiness that exceeded the published requirements for the accomplishment of the wartime mission. The 2nd Medical Detachment also assisted 3rd MEDCOM in requesting a Japanese dental equipment purchase, which was approved for the amount of $1.2 million. Since it was not utilized during the war, this equipment will be stored at Tobyhanna Depot, Pennsylvania for future distribution by the Office of the Surgeon General.

The most important function of a dental unit is to provide dental treatment, and this function occupied the vast majority of time available to dental personnel during Operation Desert Shield/Storm. Also, based on the prehostilities chemical threat, 2nd Medical Detachment ensured that each subordinate unit was trained in alternate wartime roles. These roles included the standby mission of augmenting deployed medical facilities to accomplish critical wartime tasks involving mass casualty emergency treatment, chemical casualty patient decontamination, and evacuation of the sick and wounded. The primary utilization of dental assets in alternate wartime roles in Operation Desert Shield/Storm was in giving anthrax immunizations to thousands of service members in the theater. On Jan 24, 1991, the 2nd Medical Detachment sent a warning order to both the 122nd and 123rd Medical Detachments to provide dental care for Enemy Prisoners of War (EPW) at EPW camps Brooklyn and Anthracite near Hafar Al Batin and Camp Bronx near Al Sarrar. EPW sites were operational from January 30 to March 30, 1991. The Geneva Conventions require provision of health care to EPWs on the same level as that care provided to friendly casualties. Dental services at EPW camps were established to complement the medical staff, which resulted in a satisfactory inspection by the International Committee of the Red Cross. When tasked to provide dental support for Task Force Freedom in Kuwait by 3rd MEDCOM on Feb 25, 1991, the 2nd Medical Detachment responded immediately to this requirement. Subordinate dental units were notified, briefed and deployed in support of Task Force Freedom in an expeditious manner. Dental assets from both the 122nd and 123rd Medical Detachments were placed under operational control of the commander of Task Force Freedom. Personnel were rotated weekly due to the hazards created by numerous burning oil wells surrounding Kuwait City. The humanitarian dental support provided in Kuwait will long be remembered by the service members receiving this care while they were reestablishing the infrastructure for Kuwait. The clinic remained operational from Feb 25, 1991 to Apr 11, 1991.

In order to record dental workload, a dental workload reporting system was established late in Operation Desert Shield for the dental units in SWA. This illustrated the fact that the great majority of dental officers in Operation Dessert Shield/Storm did not fall under direct dental command and control of either an AI or an HA detachment. Of the 168 dental officers in Operation Desert Shield/Storm, 74 were assigned to hospitals, 31 to provide unit level dental support, 61 to the five dental TOE units (1 AI and 4 HA) to provide area dental support, and 2 officers were assigned as staff officers (one assigned to the 332nd Medical Brigade as the VII Corps Dental Surgeon and one assigned to the 3rd MEDCOM as the dental consultant). According to doctrine, approximately one-third of the dental officers within the combat zone do not fall under direct dental command and control. In Operation Desert Shield/Storm, two-thirds of the dental officers did not fall under direct dental command and control, which is the result of the increase in number of hospital units, but more importantly, the lack of area dental support units (HA) within the theater. Since the AI Detachment had no command of either hospital or unit level dental assets, the dental workload report did not include workload for these dental officers. Cooperation between all the different dental elements within the theater is a must, and it simply did not exist for workload reporting. The medical command dental surgeon has technical control over all dental assets within the theater. Technical control is an ill-defined term, and the 3rd MEDCOM commander did not designate a theater dental surgeon, but instead, chose to

name a MEDCOM dental consultant. The simple solution is to designate a theater dental surgeon or to dual-hat the AI commander as the theater dental surgeon; neither option was exercised by the MEDCOM commander. This automated report enabled the command and control element (2nd Medical Detachment) to monitor types and numbers of patients treated, in addition to making sure dental corps assets were located in troop populated areas. Daily dental procedures worksheets for each dental unit in both VII and XVIII Corps as well as EAC dental units showed both emergency and routine care and included a section on diagnosis. This formation was collected from each of the four HA detachments in theater, consolidated, and reported to 3rd MEDCOM on a monthly basis.

Having overall responsibility for reporting area dental support units and command responsibilities for EAC dental units resulted in 2nd Medical Detachment proposing the redeployment plan for all subordinate units to Germany, as well as recommending the "stay behind" force to the MEDCOM commander. On Mar 11, 1991, officers of the 2nd Medical Detachment attended the first meeting with the area support group regarding redeployment. At this time they were provided with basic guidance concerning preparation procedures for their return to Germany. Subordinate units were notified of redeployment procedures on Mar 14, 1991 at a Dental Commanders' conference in Riyadh, and redeployment dates were tentatively agreed upon at the Mar 30, 1991 redeployment conference. The 122nd Medical Detachment (HA) was designated as the "stay behind" dental unit. Preparation for shipment of the 2nd Medical Detachment's equipment via Milvans and the unit's TOE vehicles began. This process was culminated on Mar 30, 1991 when the Milvan was picked up for transport to Heidelberg, Germany. Unit vehicles were turned in to the transportation group at Dammam Port, Saudi Arabia Apr 10, 1991, and the 2nd Medical Detachment personnel departed Saudi Arabia on Apr 11, 91 for their return to Germany. The 2nd Medical Detachment arrived at Rhein Main Air Force Base in Frankfurt, Germany and was greeted by Maj Gen Michael J. Scotti, Jr the Commander of 7th Medical Command. The unit was transported by bus to its headquarters in Heidelberg, Germany, where a reception for unit personnel and their family members was hosted by the dental staff of 7th MEDCOM. After-action reports, individual awards and other administrative requirements kept unit members very busy for the next few weeks.

Unit equipment and supplies on the Milvan and the unit vehicles were returned to 2nd Medical Detachment in Heidelberg, Germany, in October 1991, some six months after turn-in for shipment from Dammam Port, Saudi Arabia.

Lessons Learned[3]

a. **Deployment of AI Detachment:** The AI Detachment should deploy at least one month prior to the HA Detachments. With the AI Detachment previously established in theater, logistical and administrative assistance to the HA Detachments would be maximized. The AI should also be one of the last units to redeploy!

b. **Vehicles/Transportation:** Each Detachment should arrange for vehicles to be shipped early enough to be available when the unit arrives in theater. Transportation availability impacts greatly on the establishment process. Depending on nonorganic transportation delays action. Also, vehicle assets that satisfy unit requirements in peace-time will not necessarily meet the combat mission requirements in time of war.

c. **Deploy with 100% Required Personnel Assets:** Deployment without necessary manpower assets can adversely impact mission accomplishment.

d. **Communications:** Although there was an extensive communications network tied to land lines and a telephone net, communication was difficult at best. Every time a unit moved, it resulted in the need to re-establish communication links with a fixed unit. The 2nd Medical Detachment remained in its original location in Riyadh and had access to both a fixed TAC line and AT&T and thus served as a vital communication link for all dental units within the theater. Informed troops function at higher levels of morale and efficiency. During early stages of deployment, information channels were not optimal. As information was disseminated and channels were established, troop moral and efficiency improved greatly. Better communication with satellite phones is urgently needed for both AI and HA detachments.

e. **Command Group Changes:** Those making assignments must be extremely cognizant of the roles played by key personnel and their impact on the mission. Newly assigned command personnel lacked the institutional knowledge to facilitate a smoothly functional deployment.

f. **Dental Equipment:** Durability of equipment was excellent and surprisingly few equipment failures occurred considering the long hours of use in the harsh desert environment. TOE dental equipment needs modernization with emphasis on reducing weight and updating equipment chests with supplies and instruments. Tentage, power distribution, the heating and air conditioning must be coordinated with Deployable Medical System (DEPMEDS) to ensure compatibility with other AMEDD units.

g. **Oral Surgeons:** Proper assessment of material and equipment prior to deployment is essential. Oral surgeons arrived in theater without adequate equipment for mission performance. This equipment was not readily available on the local civilian market. Fixation kits and electrical handpieces are absolute necessities for the wartime mission of oral surgeons.

h. **06 HA Commanders:** Most efficient utilization of assets is assured when decisions are made by personnel knowledgeable about the intricacies involved. Dental HA detachment com-

manders must interact with decision-making levels of command. Detachment commanders without sufficient rank and authority will have difficulty utilizing their resources as prescribed by Dental Corps doctrine.

i. **Rear Detachment Support:** Establish viable support systems in advance to allow for the learning process. In many instances, rear detachments do not have the necessary resources with which to respond to forward units. Communication difficulties make rear detachment support difficult at best.

j. **Troop Concentrations:** Dental services are maximally utilized if collocated with troop concentrations, and if troops know where the clinics are located and have access to them. Due to these factors, dental assets relocated frequently to accommodate troops. Utilizing this philosophy, dental treatment was provided for 10,000 to 15,000 soldiers per month. Approximately 20 clinics were established throughout Saudi Arabia and Kuwait. Coordination with medical groups and eventually with evacuation and combat support hospitals is best accomplished in the formative stages of these hospitals by working with the medical group or brigade staff. These hospitals are excellent facilities for attachment of dental officers. In addition to dental services, the alternate wartime roles of dentists could be more fully utilized.

k. **Dental Corps Staffing Doctrine:** Comprehensive care can be provided for 20,000 troops by one HA detachment. If an HA detachment is placed in support of 50,000 troops, then only emergency care can be expected. Any conflict expected to last longer than six months should be staffed dentally according to doctrine, since any dental disease in the theater will worsen with time. Dental care is proactive; we need to ensure that all deploying troops are in dental fitness I or II. In Operation Desert Storm, there were inadequate numbers of dentists to accomplish the redeployment examinations for ARNG, USAR and active duty service members. For example, VII Corps with 145,000 soldiers was assigned only a single HA detachment.

SUMMARY

The mission of the 2nd Medical Detachment (AI) was to coordinate with all combat, combat support and combat service support units to ensure adequate dental care for soldiers in the theater for emergency and routine treatment. Rapidly moving events required constant re-evaluation of unit operations. We were successful with our mission because we had 168 well-trained, fully-equipped and highly motivated dental officers in the theater. Access to dental care was enhanced with the emphasis on establishing dental clinics near large troop concentrations or by colocating dental clinics with Evacuation and Combat Support Hospitals. Not only was care provided to US service members, responsibility for providing dental care for approximately 100,000 EPWs at three locations within Saudi Arabia was accomplished. The 2nd Medical Detachment (AI) was assigned as the Dental command and control element for 3rd Medical Command. We established dental clinics, billeting locations, supply networking and administration of dental support in Southwest Asia from Dec 11, 1990 until Apr 11, 1991. On Apr 11, 1991 overall theater control of dental assets was turned over to the 122nd Medical Detachment. The 2nd Medical Detachment (AI) was successful with its mission because of the flexibility, innovation, and willingness of the members to be team players. It is truly representative of the outstanding soldiers in the Army dental care system. Every soldier in HSC, 7th MEDCOM and throughout the dental care system who helped deploying units by ensuring dental readiness contributed to our nations's victory.

REFERENCES

1. FM 8-26, Dental Service, Sep 1980.
2. Association of the United States Army. The US Army in Operation Desert Storm: An Overview. June 1991.
3. English J: Operation Desert Shield/Storm Historical Timeline and Personnel Inquiry for 2nd Med Det (AI). Dec 1991. ●