Strategy Research Project

OBSERVATIONS ON THE JOINT SERVICE MILITARY MEDICAL FACILITY: WHAT DOES THE FUTURE HOLD?

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USAWC STRATEGY RESEARCH PROJECT

OBSERVATIONS ON THE JOINT SERVICE MILITARY MEDICAL FACILITY: WHAT DOES THE FUTURE HOLD?

by

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This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

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ABSTRACT

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There has been much discussion regarding the Unified Medical Command (MEDCOM), but not much written about what "right might look like" for the Service medical organizations. Our Service Medical Centers (MEDCENs) are a strategic asset in the healthcare mission and will continue to be as they move into the realm of joint MEDCENs. To extend some recent speculation about joint MEDCENs, this paper describes the prototype organization of the joint MEDCEN model that has been in joint operation for the past ten years: Landstuhl Regional Medical Center (LRMC) in Landstuhl, Germany. It further describes the historical transformation of LRMC into the joint organization that it is today, its evolution during peacetime, its integration of joint staffing during Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF), its progress to achieve jointness, and efforts to make it part of the organizational culture. The paper concludes with recommendations on what still needs to be done to create a fully joint environment of a tertiary care MEDCEN.

OBSERVATIONS ON THE JOINT SERVICE MILITARY MEDICAL FACILITY: WHAT DOES THE FUTURE HOLD?

> We're still wrestling as a healthcare system today about what we can do jointly. Actually, we can do more.
>
> —MG Elder Granger, Director TRICARE

Prologue

The culture of medicine and healthcare unifies our military medical services, determining the processes and applications of our delivery of healthcare. Currently, the parochial stovepipes, the administration, the logistics, staffing, facility design, and staffing all present challenges and impediments to building an integrated and joint healthcare system. Our parochial service cultures may undermine these efforts. However, we may find that in our joint effort to provide world-class healthcare, there is strength in our diversity. An example of this strength in diversity and of how this forthcoming merger of the three medical services might work is most readily evident in the management and operation of Landstuhl Regional Medical Center (LRMC).

LRMC exhibits the full spectrum of joint, interagency and multinational healthcare delivery and management. Service identities, although quite evident, are substantially discounted in the context of provision and delivery of healthcare. At LRMC, physicians advocate staffing methodologies that seem to support one Service over the other, but all for the sake of better and more efficient access to medical care. At LRMC, you really can't tell who is who under the scrubs, the white coats, or BDUs—because, in my opinion, this medical organization has cracked the code on a joint medical mentality. Maybe it's the mindset of the mission of, and at, LRMC, and maybe that cannot be duplicated elsewhere. But an attempt to replicate the LRMC example is surely worth the effort. This SRP advocates using LRMC as a model for a joint military medical organization.

The military medical community's strategic goal is to provide world class healthcare for our patients and beneficiaries in the most efficient and cost-effective manner. Indeed, the dilemma of establishing a joint military healthcare reality is not unlike that of civilian healthcare mergers of disparate integrated healthcare delivery systems. The civilian model often juxtaposes different corporate entities and cultures that are forcibly or otherwise merged to form a single viable healthcare entity. Our military healthcare system faces a similar challenge.

A New Medical Governance Plan

There has been much discussion regarding the Joint or Unified Medical Command (UMC) (MEDCOM), but not much written about what "right might look like" for the military medical services. A recent decision in December 2006, by Deputy Secretary of Defense, Gordon England, shelved the concept of the UMC in favor of a "new governance plan." This new health services reorganization plan will now focus on four key functional areas rather than a wholly unified system. These targeted areas include Medical Research, Medical Education and Training, Healthcare Delivery in Major Military Markets, and Shared Support Services.[1] This new plan is a less ambitious and a more modest plan than the original concept of merging the three armed services healthcare systems.[2]

As part of this plan, direct care medical organizations will merge jointly in many of the major military markets. How these mergers might approach the transition, and the obstacles they will face may be viewed through the lens of one organization that has been touted as a model for joint military medical facilities: Landstuhl Regional Medical Center, Germany. This paper will focus on the joint integration of healthcare delivery in our service Medical Centers (MEDCENs).

Our service MEDCENs are a strategic asset in the Department of Defense (DoD) healthcare service support (HSS) delivery mission; they will continue to be as they move into the realm of joint MEDCENs. Under the mandates of BRAC 2005, joint MEDCENs will be a functioning reality in every sense of the term. The proposal to consolidate military medical health services and/or a joint/unified medical command has been studied at least 16 times since 1948.[3] The latest study (2006) by the Defense Business Board (DBB) concluded that now is the time to reconfigure the way in which military medicine is delivered since it has grown into a significant strategic national asset. The report cited that military medicine can contribute in missions such as health diplomacy as a tool for winning hearts and minds in current global missions.[4]

In these times of spiraling healthcare costs, civilian healthcare organizations, just as military healthcare organizations, are seeking ways to more efficiently deliver healthcare – often through mergers, consolidations, reduction of redundancies, and economy of efficiencies. Benchmarking metrics and unity of effort within geographical healthcare markets provide means for these actions and other enterprise best business practices. The DoD direct care military healthcare system can achieve similar benefits through reconfiguring itself as a joint organization and adapting similar appropriate healthcare industry best practices,[5] such as joint organization consolidation.

The DBB primarily reviewed the recommendation for a UMC and the impact of Title 10 on military medicine. The DBB found that a UMC was feasible within the context of Title 10. It was also clear to the DBB that service-specific operational mission needs, such as battlefield and forward-deployed medicine (levels I and II), should remain organic and embedded within each Service. [6]

The DBB found that creating a joint command structure would inherently reduce costs through eliminating redundant processes and facilitating consolidation of personnel, thereby creating a more efficient and effective healthcare system. Service-specific needs would still be addressed and implemented. Some participants at a DBB public session stated that the current healthcare system already operates in a joint manner, especially in the non-battlefield echelons of care (Level III and above care facilities).[7]

What's Joint?

Consider this broad definition of "joint": more than one service operating for an extended period of time to perform a mission. But, this is too simplistic for a multifaceted organization contributing to the healthcare delivery realm of today's Military Health System (MHS).

Operating in a "joint manner" is more akin to joint integration or a joint operation; however, this is not the same as an organization being officially designated as a joint. Joint integration refers to the operation of a sustained mission with two or more Services without the official joint designation of the Secretary of Defense, under the auspices of the Assistant Secretary of Defense for Force Management Policy (ASD (FMP)) as mandated by the Joint Duty Assignment List (JDAL).[8]

What makes an organization officially joint? Title10 specifies that a multi-Service or multi-national command or activity involved in the integrated employment or support of the land, sea, or air forces of at least two of the three military Services.[9] This definition is not all-inclusive; under Title 10, the special branches (Medical, Chaplains, and Judge Advocates) are excluded from joint duty assignment list (JDAL) positions.[10]

Medical organizations are not included under the joint definition because it is not a requirement for such organizations to be "joint" nor for officers of these branches to fulfill the Goldwater-Nichols joint duty requirement as a prerequisite for flag rank. There is, however, precedent for a joint medical organization that is officially designated as such: the Armed Forces Radiobiology Research Institute (AFRRI), was established in 1961 as a joint agency of the three military departments under the control of the Office of the Secretary of Defense (OSD).[11]

Military medicine, and medicine in general, has always been, in practice both collegial and "joint" to some extent. This "jointness" transcends the collaborative nature that is intrinsic to the art and practice of medicine and the delivery of healthcare. Perhaps it would be clearer and more efficient to think about medical organizations as those that already function and operate in the joint environment as part of their normal daily operations. Is it really necessary to be officially designated joint to be joint? In these times of fully integrated joint operations at all levels, is the official designation of "being joint" an artifact mandated simply in the construct of Goldwater-Nichols accounting? If so, then this artifact builds a wall between the "haves" and "have-nots" within our Services in the quest for the title of joint. It is this difference that drives the wedge between "joint environment" as opposed to "joint billet." So why is "being joint" an imperative now?

The BRAC Effect on Joint Military Medicine

The Base Realignment and Closure (BRAC) 2005 decision will indeed force the service medical communities to work more jointly than they ever have in the past. BRAC mandates that medical activities (MEDDACs) and medical centers (MEDCENs) form lead agent integrated healthcare delivery systems for their geographical areas in which there are large military populations and geographical redundant medical facilities. San Antonio and the National Capital Region (NCR) will serve as a starting point, with many more to follow.[12]

"Lead-agent" implies that a specific service will be in command of the facility. While the staffs will or can be integrated/joint, the command of the hospital will be "fenced" for a particular service. Jointly staffed is different from jointly commanded. This distinction is problematic in the conceptual construct of truly joint medical facilities.

BRAC 2005 has mandated military medical jointness, so DoD officials plan to close Walter Reed Army Medical Center (WRAMC) in Washington, DC and invest nearly two billion dollars in the National Capital Region (NCR) to form a new medical entity on the campus of the National Naval Medical Center (NNMC) in Bethesda, Md. The new center will be jointly staffed with personnel from the Army, Navy, and Air Force.[13]

In preparation for these changes in the NCR, a working group, the Office of Integration, has been formed to functionally manage and direct integration of WRAMC and the NNMC, along with Malcolm Grow Medical Center at Andrews AFB, Dewitt Army Community Hospital at Ft. Belvoir, and associated area clinics.[14] But the Office of Integration will focus on integration of the two major MEDCENs (WRAMC and NNMC) by the BRAC mandated date of 15 May 2011. The new facility will be under Navy command and control.[15] If there were a joint/unified

medical command, as has been proposed earlier, then the new facility could be joint and report to the joint command.[16] To establish greater joint medical governance, the BRAC requirements in the NCR and San Antonio (SA) area will be implemented first. After that, lessons learned will be implemented in other multi-service markets.[17]

The 2005 BRAC recommendations create six new centers for biomedical research—all are joint. The joint centers of excellence (COE) include Battlefield Health and Trauma; Infectious Disease; Aerospace Medicine Research; Regulated Medical Product Development and Acquisition; Biomedical Defense; and Chemical, Biological Defense Research, Development, and Acquisition.[18]

Previous BRACs (1988, 1991, 1993, and 1995) have had an impact on military medicine, but never so much as BRAC 2005. BRAC 1988 recommended that Letterman Army Medical Center be closed.[19] This was the first major military medical center to fall under the BRAC knife. Other military medical facilities soon followed, among them: Walson, Ft. Dix, NJ; Philadelphia Naval Hospital, PA; Oak Knoll Naval Hospital, Oakland, CA; base hospitals at Mather and McClellan, Sacramento, CA; March AFB hospital, CA; Fitzsimmons Medical Center, Aurora, CO, among others.[20]

Unlike previous BRAC actions, BRAC 2005 will force the merger of remaining medical treatment facilities (MTFs) in large military population areas, possibly as well as those in other geographic areas. The Joint Cross-Service Group (JCSG), newly added to the 2005 round of BRAC, was able to make recommendations to the Secretary of Defense. In past BRAC rounds, joint groups only advised service leaders.[21] The JCSG was instrumental in shaping the medical infrastructure inventory for the 2005 BRAC and targeting those facilities that will remain to support the nation's future HSS needs strategically. But, prior to all of this new BRAC-related jointness, the Services have attempted joint HSS operations on their own in the past. But these efforts usually lasted for short or temporary periods of time.

History of Medical Facility Jointness

The idea of multi-service medical units, or MEDCEN organizations, is not new. The first recorded instance of such an organization in which more than one service provided daily medical care concurrently working together came in the late 1940s at Tripler General Hospital in Hawaii. This new 1500-bed hospital was initially commanded by an Air Force surgeon and staffed by Army and Air Force medics. Later, the Navy closed its local hospital in Hawaii and moved its patients and staff to Tripler, thereby making Tripler the very first tri-service fixed facility MTF.[22]

In 1949, Army nurse corps officers from the 22nd General Hospital (GH) were assigned on a voluntary basis to a Navy hospital in Guam, along with similar additional short-term ventures at Clark Field in the Philippines.[23] In 1987, Health Services Command (HSC) engaged in cooperative efforts with other Services to form jointly operated facilities. Brooke Army Medical Center (BAMC) joined Wilford Hall Air Force Medical Center to form San Antonio Joint Military Medical Command (SAJMMC), under DoD control. This experiment ended in 1991, and BAMC returned to HSC control.[24] Other joint-service efforts were initiated in the Delaware Valley, affecting the Ft. Dix, NJ MEDDAC, Walson Army Community Hospital in 1992, which was operated jointly. Due to realignments and closures (BRAC1988), the Army, Air Force, and Navy fused medical staffs to operate the hospital jointly for a temporary 15-month period, ending in 1993.[25]

Another such venture involved the sharing of military medical postgraduate education and professional staffing resources between the two MEDCENs operating in Central California. A good case in point was the interaction of regional single service MEDCENs such as Letterman Army Medical Center (LAMC), Presidio of San Francisco (PSF, CA), and David Grant Medical Center, Travis AFB. Post-graduate medical education programs have always been collegial and quasi-joint; specialty services and some civilian personnel were occasionally shared as well, but these initiatives were often beset with discrepancies and parochial service biases. Professional interaction with the local Veterans Affairs (VA) hospitals and civilian university medical centers such as University of San Francisco (UCSF) were common for both of these organizations.

Letterman was an Army MEDCEN, but it also had other Service members on the professional staff and enrolled in post-graduate medical training programs. These included members from the Air Force, Navy, and Public Health Service. Observers could not tell which Service their physician belonged to under their customary white coat or in their scrubs. This was as it should be: transparent professional medical care, regardless of service affiliation. Patients from all services came to LAMC—most were retired. Patients really did not care what Service took care of them; they were simply seeking excellent, compassionate, and affordable medical care.

When the 1988 BRAC closed LAMC in 1995, the patient care load shifted to Travis and the Air Force became the lead agent for medical delivery in the central California region. These “joint interoperable” efforts were cooperative ventures; they did not remove Army facilities from Army control.[26] Today, there are three remaining military medical centers on the West Coast, all with separate lead agents in control of their single service facilities: the Army in Tacoma, Washington, the Air Force in Travis in Fairfield, CA, and the Navy in San Diego, CA.

Reserve Component Medical Joint Operations

Medical Joint operations are not new to the Reserve Component (RC). Indeed, RC medical training missions have often been joint, due in large part to the geographical locations and dispersion of parent service facilities. An example of these joint medical operations have included Annual Training (ATs) opportunities with the Naval Medical Center, San Diego, CA and David Grant Medical Center, Travis AFB, CA for Army RC units, such as the 921st Field Hospital (FH) from Sacramento, CA in 1999. Further examples can be found in field training exercises (FTXs) PACIFIC WARRIOR (January, 2001), during which the 921st FH and the Naval Fleet Hospital, Bremerton, WA set up a joint Deployable Medical Systems (DEPMEDs) combat support hospital (CSH-)(level III) alongside an Air Force Expeditionary Medical Support (EMEDS) hospital at Scholfield Barracks, HI. The joint CSH operated with the Army in command for one week, and then switched to Navy command the following week. The command staffs were jointly staffed and interoperable (albeit using some interesting /differing terminology) from the beginning of the exercise. The 2nd Medical Brigade (BDE), San Pablo, CA (RC) provided higher level command and control (C2), and Tripler MEDCEN provided tertiary care/Level IV/V HSS support.

More recently, Army RC units such as the 94th GH, 349th CSH, 328th CSH, and 4005th GH have provided backfill augmentation support to HSS operations, such as those at LRMC, Germany since the beginning of 2003 and Operation Iraqi Freedom (OIF). The Army Reserve retained the LRMC support mission for three years; however, due to reduced medical unit availability within the Army Reserve as a result of multiple OIF/OEF rotations, the Navy Reserve was tasked with the ongoing LRMC mission. The experiences of these units, particularly some of the joint integration issues, are discussed further in this paper.

The Army RC unit (4005th GH) at LRMC has recently handed off the backfill mission to the Navy Fleet Hospital (RC), Great Lakes, IL as of November 2006 for the next 12 to 15 months. This is indeed a momentous time at Landstuhl; now more than ever before, Landstuhl is operating as a true joint organization, melding all three military medical services into one operational team.

History of LRMC and Evolving Jointness: “Selfless-Service”

Interestingly, LRMC has been operating as a joint medical facility for some time. LTG Peach Taylor, Air Force Surgeon General who headed the Joint Cross Service Group (JCSG) that worked on DoD’s medical BRAC 2005 recommendations, has endorsed joint medical organizations: “We know these types of joint medical facilities work. We have two of them today:

Landstuhl Regional Medical Center in Germany has been staffed by Army and Air Force for more than 10 years. If you go to Balad Hospital in Balad, Iraq, it is Army and Air Force run."[27] The daily joint operation of a MEDCEN is most evident at LRMC. LRMC has undergone many transitions that have transformed this facility into the world-class jointly operated medical organization it is today.

LRMC is the primary tertiary care fixed medical facility receiving U.S. and Coalition forces from 41 countries, who have been evacuated from the European Command (EUCOM) and Central Command (CENTCOM) theaters of operation. Additionally, LRMC provides primary and tertiary care to over 300,000 beneficiaries in EUCOM. As such, LRMC has become, by default, the focal point for OEF/OIF receiving and stabilization.[28]

LRMC has a staff of 2000+ military personnel, Department of the Army (DA) civilians, and contractor personnel, making it the largest US military medical facility outside of the United States. It is a joint operation, although not designated as such. Departments are fully and jointly integrated at LRMC across the board, from the command suite to the services that support the hospital. While the Army serves as the command lead agent at LRMC, personnel from the embedded 86th Medical Squadron and the 212th Combat Support Hospital (CSH) hold some of the key command and staff positions throughout the medical center,[29] as well as members of the Navy contingent that are now resident at LRMC. Joint teams are performing throughout the command suite, in nursing, in the clinics, and within the allied support services.

So why is LRMC not an officially designated joint organization? Many of the congressional delegations, VIPs, Distinguished Visitors (DVs), and Combatant Command (COCOM) commanders who have come to LRMC and marveled at the seamless care provided by this joint medical team are surprised to discover that LRMC is not officially designated as a joint organization. By law, LRMC is not considered a joint service assignment; it is officially under the command and control of the Army.[30] The Air Force staff working at LRMC are actually assigned to the 86th Medical Group at Ramstein Air Base.[31]

Nonetheless, the LRMC mix includes Reserve Component forces, service civilians (DA, DAF/DNAV), interagency personnel, contractors, and host nation/multinationals. So LRMC epitomizes the multi-faceted characteristics of a truly joint culture. It is this multi-faceted characteristic that makes LRMC an ideal organizational study in jointness, unique in the armed forces medical community. Currently, at LRMC **all** uniformed services of both components (AC/RC) are working together to provide world-class healthcare services.

Jointness and the development of joint medical culture are not new phenomena for LRMC. The process began incrementally out of the preparation and crucible of war in the days

of Desert Shield/Desert Storm (DS/DS) and the subsequent reduction in force in Europe during the early to mid-1990s. Significantly, the LRMC story is not just one about Army medical success, but about laying the groundwork for future joint success. This is their story.

In 1979, Landstuhl Medical Activity (LEDUC), one of several European Army Medical Activities (Medics), became Landstuhl Army Regional Medical Center (LARCH),[32] signifying its new status among medical facilities in Europe as a regional medical center. Air Force and Navy medical facilities in Europe operated parallel to the Army facilities.

The first Army Reservists from the 344th General Hospital (GH) arrived at LARMC, on 26 Dec, 1990 in support of DS/DS. Nine separate units with over 850 reservists were in-processed and integrated into the hospital staff. Also, supplementing the hospital Patient Administration (PAD) were liaison teams from the Navy, Marine Corps, U.S. Army Europe (USAREUR) Casualty representatives, and the Deutsches Administrative Team.[33] The hospital expanded from its peacetime bed capacity of 120 beds to 1000 beds in order to prepare for casualties from DS/DS. In total, Landstuhl admitted and treated over 4000 injured and wounded service members from the Persian Gulf War.[34] For its performance and HSS operations during the Gulf War, the 2nd GH, as part of LARMC, received the Superior Unit Award in November 1991.[35]

Like the ongoing BRAC operations in the US, the end of the Cold War and calls for a "peace dividend" foretold the reduction of forces in Europe. The year 1992 saw reduced military medical staffing across the services, due primarily to drawdown actions. LARMC's staff was significantly reduced, and service-wide military community hospitals and clinics were either selected for closure, relocation, reduction, absorption, or consolidation.

Relocation of the USAF 18th Aeromedical Staging Facility (ASF) from Wiesbaden to LARMC, one of the first such relocation actions, began in 1992, due to continued drawdown of medical assets at Wiesbaden AF hospital.[36] In 1992, with the pending closure of the USAF MEDCEN at Wiesbaden, Germany, Army and Air Force medical leaders directed the reassignment of 288 AF authorizations to LARMC.[37] In April 1993, the first of the 288 USAF medical personnel arrived at LARMC to become part of the 86th Medical Group. These personnel were quickly, and some would say clumsily,[38] integrated into the medical staff at various staff, unit, section, and department levels.[39]

The integration of the Air Force and Army at LARMC did not come without its immediate problems. Nursing issues and differences in service culture, bias, jealousy, and service parochialism plagued the integration at first, both for Army and Air Force personnel.[40] The abrupt merger of the staffs, however well-intentioned, was perhaps, not well planned. It took time for the staffs to feel their way through the service cultural divides; but through it all, their

common dedication to the provision of care and delivery of medicine united the LARMC personnel.

A nurse executive from LARMC at the time observed that, “The main point is the acceptance of patient care is universal, the tools we use are universal. As the personnel have integrated throughout the facility, I have seen ownership; it has become our hospital. What we do here reflects upon us regardless of what service we belong to.” [41] Encouragingly, the LARMC organization as a healthcare entity sought to balance its staffing needs, continued to look for ways to ease the integration,[42] and excelled in its mission of providing superlative care.

With the influx of the USAF personnel, the inpatient bed capacity for the hospital increased from 120 to 165 staffed beds. Additionally, the Vogelweh and Muenchweiler Health Clinics relocated and combined personnel to establish the Primary Care Clinic at LARMC.[43] Upon completion of these actions, the Army effectively emerged as the lead agent for tertiary HSS in Europe.

With the inactivation of the imbedded 2nd GH on 30 Sept 1994,[44] the now renamed Landstuhl Regional Medical Center (LRMC) was born as a TDA organization.[45] The name change from Landstuhl Army Regional Medical Center (LARMC), an Army centric name, to Landstuhl Regional Medical Center (LRMC), a joint centric naming convention, was a very important and critical action – and vital evidence of the continuing joint evolution of the organization. This is probably the time when the LRMC Table of Authorizations (TDA)/manning document was first developed in concert with administrative input from the USAF 86th Med Group. This action authorized cross-over staffing within hospital departments. This staffing mechanism would probably not have been feasible under the 2nd GH manning document.

In 1996, Army reservists once again found themselves at LRMC as part of Operation Backbone, the movement of reservists to backfill medical staff in Europe. This operation brought a total of 168 Army reservists to LRMC to replace and augment active Army and Air Force members deployed in support of Operation Joint Endeavor/Kosovo.[46] In April 1999, the 86th ASF relocated from LRMC to Ramstein AFB, although the Air Evacuation Section of the ASF remained at LRMC to process patients using the medical evacuation system.[47] The USAF 86th ATH (Air Transportable Hospital) deployed in May 1999 to construct a 10-bed Field Hospital (FH) with supporting Army OR, XR, and Lab components in Tazar Main Base, Hungary.[48]

The USAF Critical Care Air Transport Teams (CCATT) began their operations at LRMC in the late 1990s. These teams are flying intensive care units; they have been an integral part of the trauma care provided to all beneficiaries. Although primarily Air Force staffed, members of other Services are frequently trained to provide life-sustaining medical support to patients on

board these intensive care transports. At LRMC, it is not uncommon to find Army cardiopulmonary/respiratory technicians on board alongside of a Navy Pulmonary Care/Intensivist physician, alongside of Air Force CCATT personnel. This is especially true of LRMC's own Pulmonary or "Lung" Team, an off-shoot of the CCATT. This pulmonary specialty team is dispatched downrange to support a patient who is not stable enough to be transported, but who would otherwise expire without this care.

The LRMC Pulmonary Team is tri-service staffed. But, no matter how joint the medical care is, administrative and logistical issues can sometimes complicate the team's dispatch from a TDA organization. Equipment such as armored vests, helmets, and other TA-50 items were not readily available for the team members on a moment's notice from their parent Services. These complications were rectified at LRMC by providing a "Ready Room" stocked with applicable Personal Protective Equipment (PPE) equipment, TA-50 items, etc. that were purchased and placed in a centralized and immediately accessible location to outfit the entire team. Although these items were purchased with "Army" funds, LRMC's joint mentality and environment assured that the team was properly equipped regardless of perennial "nickel and dime" issues.

As LRMC entered the new millennium, continued integration of the USAF and Navy into the LRMC family made this a true tri-service medical facility.[49] Arrival of permanent party Navy Intensive Care/Pulmonary medical officers, Navy and Marine Corps liaison teams as permanent staff at LRMC, as well as the continued rotations of RC assets to LRMC, are all indicative of the joint application of the one-team culture of LRMC as a joint medical organization.

The importance of jointness at LRMC is best embodied by the example of one of LRMC's former commanders, then COL Elder Granger, LRMC Commander from 1999 to 2001. During an interview in 2002 for a book on the 50-year history of LRMC, BG (now MG) Granger offered the following insights into the joint culture at LRMC:

> I see what we do [at Landstuhl] as being a family really. The Army, Air Force, Navy, our civilian workers and local nationals here supporting our mission. In a family you emphasize the importance of taking care of one another. And if we don't have that family concept as an organization, if we don't emphasize the importance of taking care of one another, it's kind of difficult for us to truly want to take care of those who are entitled to the service. It's a right and a privilege for us to serve them. So you've got to take care of family first, then we start taking care of those who are entitled to care. That's why I've always been a strong proponent that an organization should be a family.
>
> When I left here in 1992, they brought in maybe 30 or 40 [USAF] individuals that they started to integrate into the staff. As we've had a rapid drawdown, reduction in force, and closing of the Air Force Medical Center in Wiesbaden, Germany, it

> increased over time up to 300. So I can say since I arrived [back at Landstuhl], it's consistently right around 300. The Navy contingency is a really small staff, two Navy individuals. Small staff, but huge mission and function. If you look what happened here during the USS Cole, that office, along with other Navy personnel, played a key role coordinating some of the things unique about the Navy. That's one of the beauties about having tri-service here.
>
> If you look at the jointness of the organization, I think it's the right thing to do. As far as I'm concerned, it's long overdue. It should have happened probably 10-15 years ago. We're still wrestling as a healthcare system today about what we can do jointly. Actually, we can do more. A lot of times the senior leaders of the Army, Air Force and Navy on the medical side, talk about Landstuhl as being a model. I think it's a model because we truly try to disregard parochialism. We truly try to look at what is the mission, what do we take care of, and how we can support one another. When I first got here, I saw that this came with a little phrase: "one mission, one healthcare team."
>
> In spite of our uniqueness of supporting the Army, Air Force, and Navy war fighters, when we have to send an air transportable mission out to pick up a critically ill soldier, airman, or sailor, or a mother, high risk or infant, we look at what the mission is. Not so much the color of the uniform but who has the capability out of this joint organization to take care of the mission. That's what I see we should be doing more of in DoD overall; still maintaining our service uniqueness, but doing more jointly.[50]

Born Joint at LRMC

At LRMC, it was not just the people of the organization that gave evidence that a joint medical culture existed and operated. Innovations and additional joint enablers /systems were born at LRMC, most out of medical operational necessity. In fact, they have become models themselves. Perhaps the first enabler was the Deployed Warrior Medical Management Center (DWMMC) established in October, 2001 to manage and treat all evacuees – military, civilian, and contractors alike—from Operation Enduring Freedom (OEF).[51] During the period of October 2001 to October 2002, more than 1000 casualties from OEF were treated at LRMC.[52]

The DWMMC administratively handles all records and transit issues. They coordinate medical issues with commands downrange and receive patients from air evacuation. After patients are stabilized, they are returned to duty or transited to the US for further treatment.[53] Originally staffed to support OEF with LRMC internal personnel assets, the DWMMC could not efficiently manage the rising numbers of casualties without augmentation. As a result of OEF and the continuing preparations for a projected larger mission in support of OIF for which the embedded 212th Mobile Army Surgical Hospital (MASH),[54] some surgical teams, and many LRMC Army /Air Force staff would have to deploy downrange, another course of action was required.

To support LRMC's OIF mission in Europe, the hospital required at least 150 more beds, with supporting medical equipment and supplies, as well as backfill for the deployed LRMC personnel, and additional augmentees. As a result, the Air Force deployed a 150-bed unit type code (UTC) hospital to LRMC, plus Army and Air Force backfill personnel. Then the Army RC 94th GH began arriving in February 2003.[55] LRMC once again found itself in the business of integrating a joint staff of approximately 800 additional Army, Air Force, and Reserve component medical members. Because the DWMMC is a transient/wartime MEDCEN organization, it continues to be primarily staffed by Reserve Component personnel (Army, Air Force, Navy), supplemented by an over-hire civilian staff, along with members of the active component Air Force on 4-month rotations. Presently, the medical directorship of the DWMMC has rotated between the Army, Navy, Army RC, and Navy RC.

Like the DWMMC—and as part of the DWMMC operational necessity—development of the Joint Patient Tracking Application (JPTA) in 2002, originated at LRMC. JPTA is a joint world-wide patient tracking solution; it provides a printable patient record with real-time information available electronically to Aeromedical Staging Facilities (ASFs) and gaining healthcare facilities through a web interface.[56] JPTA is now utilized throughout the Services as a means of tracking patients through healthcare and transport transitions.

Joint Integration and LRMC Culture – One Mission, One Team

Successful major staff integration actions and the requisite organizational cultural and procedural processes do not happen overnight, especially for staff assignment actions of no more than 12 months. So too, for LRMC. As noted previously, the beginning of OIF saw the arrival of the 94th GH from Texas from January 2003 to Feb 2004, with about 45 additional members volunteering to extend, through July 2004. The 94th GH, the largest contingent that arrived in 2003, posed by far the most integration issues, especially those dealing primarily with quality of life. The LRMC campus was not physically ready to absorb the number of augmentees required to operate the hospital during wartime. Housing, transportation, dining facility issues, and segregating the 94th GH members into their own company away from the rest of LRMC troop command, initially plagued the integration and led to some morale issues in the 94th. Many of them did not feel like they truly belonged in the LRMC family. Often, there is not automatic membership in a joint community.

By the time the 349th CSH arrived from California in February 2004, all of these issues had been addressed by the LRMC command and had accordingly subsided. Primary amongst these were adequate housing, transportation, and integration into the established Troop

Command structure—as well as integration into the daily operational structure of the hospital. As a result of the improved integration processes instituted by LRMC, 67 members of the 349th requested extensions and remained at LRMC for an additional year. Their contributions were especially critical as the upcoming new year would find LRMC in an accreditation year. With 320+ RC members on each rotation, accrediting a major MEDCEN in the midst of a Joint Commission survey with such a huge staff turnover is problematic at best. However, the best was yet to come.

In January 2005, the 328th CSH arrived from Salt Lake City, UT and Sacramento, CA to relieve the 349th CSH at LRMC. By now, LRMC merger processes had been thoroughly internalized and codified, with lessons learned ingrained in the staff. What originally took months to do only a few years previously, was now accomplished in a couple of weeks. Personnel and finance actions were fine-tuned; housing and transportation options were broadened; and a much greater sense of welcoming and belonging permeated the organization. LRMC was again awarded Joint Commission accreditation, along with many kudos from the surveyors regarding organizational staff integration processes. By the end of the year, as many as 90 members of the 328th had, once again, volunteered to stay on at LRMC and extend their deployments! This measure alone, of RC members electing to stay and extend their deployments, is indicative of a healthy, inclusive joint culture.

The interest in extending rotations at LRMC was not limited to Army Reserve units; many AC Air Force members on loan to LRMC, including nurses and physicians, requested extensions. Additionally, many individual 90-day RC physicians extended their tours with LRMC. During the period from March 2004 to June 2006, RC physicians assigned to the Divisions of Medicine and Primary Care extended their tours for an aggregate total of 158 additional clinical man-months, past their initial 90-day tour![57] Money cannot buy this type of clinical proficiency and dedication to service. There is a long standing awareness and precept that RC members "vote with their feet." It is the inclusive organizational culture and the people within the organization that fuel this willingness to serve. Although not directly related to tour extensions or RC, MG Green's observation that, "…people join cultures in which they feel comfortable"[58] is an important commentary about organizations and service cultures. Perhaps, this culture is unique at LRMC. The LRMC staff do indeed feel comfortable with one another, regardless of their Service or component.

The 4005th GH from Texas arrived in January 2006, to relieve the 328th CSH, paving the way for yet another unique transition for LRMC: the Navy RC then assumed the major backfill medical support mission. The arrival of nearly 350 Navy medical personnel to LRMC in

November 2006, marked the first time a Navy contingent deployed to LRMC. The majority of the Navy staff at LRMC are Navy Reservists, who are relieving medical personnel from the Army Reserve. Although not the first time all three Services have practiced together at LRMC, this is the first time all three services in *such large numbers are all practicing together,* at the same time.

Reports from the Navy at LRMC indicate that the integration has been implemented very well, especially on the wards—in a word, "flawlessly."[59] The Navy originally, "did not anticipate many of the cultural differences they encountered almost immediately… and it's still a work in progress."[60] The Navy provided an O6 and E8 to assist with managing policy issues and cultural differences. They serve as a liaison with the Officer and Enlisted communities at LRMC, but they carry out other hospital duties as well.[61] Additionally, a Naval Pay and Personnel office was included in the development of the manpower requirement for the Navy's mission."[62]

Cultural differences aside, the Services do have ingrained administrative differences. For example, each service has its own format and different forms, as well as protocols for logging in physicians' notes.[63] Acknowledging this, some Navy staff took Army PAD courses prior to arrival at LRMC in order to prepare for the way that records and coding were handled.[64]

When asked about the joint culture at LRMC, a Navy spokesperson observed:

> Prior to the Navy's arrival, the Army and Air Force were working well together and both services were very familiar with the other's customs and courtesies, as well as culture. LRMC's joint culture has begun to evolve even further. The Navy has only been on the ground at LRMC for four months, and the Navy has had the benefit of learning from the Air Force's integration experience. The Navy Senior Leadership has played a proactive role in educating the Army and Air Force personnel at all levels of the organization with regards to the Navy customs, courtesies, and culture, which is expanding the joint culture at LRMC. [65]

Consider the following examples of the jointness achieved so far with the Navy onboard:

- "The Army has allowed Navy and Air Force personnel to be included in the Expert Field Medic Badge (EFMB) qualification process. This has allowed 15 Sailors the opportunity to learn more about the requirements of an Army Medic.

- "The monthly awards ceremony has become a Joint Service recognition ceremony to include all three services and civilians. This occurred after being onboard for one month.

- "The Warrior of the Month recognition program has been revised to include Navy personnel with our Army and Air Force counterparts. This program allows 3 Non-Commissioned Officers (NCOs) and 3 junior

> enlisted members from each service to compete in a formal board for recognition as the Warrior of the Month." [66]

This evolution of joint culture within a military medical facility offers dramatic evidence that the joint service and RC support mission at LRMC has become a resounding success story. The current LRMC Commander, COL Bryan Gamble, recently noted that: "The experience of adding the Navy at LRMC gives members and staff an ongoing opportunity to work through some of the issues of joining together in operations."[67] LRMC is, "truly a joint facility, in the true sense of the word."[68] He goes on to say that this opportunity with the Navy provides "options for a potential future joint military command that integrates medical personnel from the three services working together."[69] LRMC is squarely at the forefront of opportunity, "working the local level of BRAC, and some of the issues of the 'joint medical command' of the future."[70]

A highlight of LRMC's high quality of care and the interactive joint culture are the unit awards LRMC has received recently, all done with its joint staff. The Superior Unit Citation Award (2001 to 2003) and Meritorious Unit Citation (2004 to 2005) were awarded to LRMC for their actions as a unit during OEF/OIF. It is unfortunate that AF members and others are not generally allowed to wear these Army unit awards. As an official joint organization, all members assigned or attached to such a unit would be privileged to wear joint unit awards. Recently, the Canadian Forces Meritorious Unit Award was presented by the Canadian government to LRMC in December 2006 for service from 2001 to 2006.[71]

Lastly, joint operations at LRMC are not limited to the uniformed services. As noted by VADM Arthur, "Joint operations with the VA is more important than ever."[72] Although a small contingent, the VA is also represented at LRMC as part of the joint interagency team, and it performs medical boards for members requiring these services.

Challenges of MEDCEN Jointness: Army/ Air Force/Navy

As we have seen, LRMC is staffed by many components. There are embedded AC elements in the LRMC organizational architecture. These elements are Modified Table of Equipment (MTOE) organizational subsets of the MTF: LRMC operates daily with borrowed military manpower (BMM) from elements of the 30th Medical BDE. Contributing units include 212th CSH, 160th Forward Surgical Team (FST), 67th FST, and 254th Combat Stress Company (CSC).[73] The majority of these professional personnel work in the Emergency Department (ED). The embedded MTOE units are also deployable elements; their quick departure can wreak havoc in the staffing of a hospital with ongoing ambulatory care missions and/or an increased active census.

Sometimes, jointness at LRMC comes at a cost to the daily healthcare operation of a MEDCEN due to the competing missions of the embedded units that make up LRMC's joint organization in its current mode. This cost may mean the loss of AF physicians called away on a few hours notice to deploy on a mission to Chile or to participate on a Shuttle recovery mission. This may also occur when the professional members (physicians, nurses, allied health care) of the 212th MASH are called out to participate in humanitarian missions, such as the earthquake in Pakistan. However, these issues pale in comparison to the worldwide attention and goodwill on the world stage these missions provide to the US and the military.[74] However, competing missions do stress the staffing model within a MEDCEN. On the positive side, jointness may also provide unplanned staff increases when LRMC becomes a temporary home and a place of work for flooded-out AF military healthcare workers in the wake of Hurricane Katrina, such as occurred when LRMC received 90-120 medical personnel from Keesler AFB hospital for 4-6 months. LRMC welcomed and integrated this new AF staff, as it had so many times before. The facility was open and sponsors eagerly awaited their new arrivals.

Some problems persist in efforts to integrate LRMC, and these were sometimes problems for the RC as well. Primary amongst these problems are the Services personnel systems. For example, the LRMC Army Personnel shop is not integrated with the AF or the Navy. Separate offices support AF personnel actions onsite at the LRMC campus, while offices in Stuttgart, GE and Naples, Italy support Navy/USMC personnel. Navy personnel have had more difficulties because of the geographical distance of their personnel actions office. The LRMC and Navy RC contingent have planned for this issue, and sought to provide a Service specific Navy administrative cell for personnel actions. The AF does an impressive job in supporting their personnel, both AC and RC, through their C2 section, which takes care of awards, fitness/evaluation reports, finance/pay issues, and funding for professional Continuing Medical Education (CME). The AF administrative cell is located on-site on the LRMC/Kirchberg campus. The AF C2 section also provides training for Army and Navy personnel on the nuances of Air Force performance evaluations, awards system, etc. The Services personnel systems are different, the evaluation systems are different, differences in terminology, the use of medical personnel, training, and credentials, etc. all persist. But these are details that can be modified, adapted and standardized.

Recommendations for the Joint MEDCEN Architecture of the Future

What should or could be changed to improve the joint service organizational architecture? While the new governance structure does move the MHS closer to a unified operating model,

the Services still function under separate corporate and cultural architectures. Based on my personal observations of the joint working model of a military MEDCEN at Landstuhl, the following recommendations support development of joint MHS mechanisms:

Recommendations:

- Resolution of the joint operational environment /designation issues could be implemented through consideration of any of the following three options:
    - While there are no definitive joint billet designation requirements for MEDCENs, Title 10/Goldwater-Nichols/etc., could be amended to apply a more liberal interpretation of "joint operating environment" as a criterion for designation as a joint organization and for accumulating credit towards joint service qualification, joint awards, etc.
    - Amend Title 10, as appropriate, to optionally include officers of the Special Branches, to qualify as joint officers and receive the Joint Service Officer 3L designation. Service Medical Officers, Chaplains, and Judge Advocate General officers all serve at MEDCEN level.
    - Congressionally mandate Joint assignment designation for those MEDCENs/MTFs routinely staffed by more than one service. This will provide eligibility for joint awards, joint service experience, and career credit.
- Omit Service designation from the naming conventions of MEDCENs/MTFs. Service MEDCENs could retain their lead agent designation…or not. Simply designate them as Regional MEDCENs. Specialty departments for naval medicine or aviation/aeromedical medicine could be built within MTFs that are geographically located in service centric populations—San Diego, for example.
- Construct and approve steady-state Table of Authorizations (TDAs) for MEDCENs/MTFs
- Construct an integrated joint Service TDA. This provides staffing flexibilities and personnel efficiencies, a wider choice of opportunities for greater flexibility in geographical assignments, and increases the developmental professional opportunities for all Services.
- Build a tiered, modular expansion TDA for contingency augmentation. This provides for packaged personnel models to support facilities for either projected or unplanned personnel turnover, deployments, and other contingencies.

- Integrate the several areas in which the services' processes differ, such as staffing, credentialing, administration, clinical operations, communications, health professional education, computer systems and informatics security, research, and civilian personnel staffing.[75]
- Provide integrated budget funding lines for operationally joint programs within the organization.
- Integrate VA and other interagency support organizations where appropriate and cost effective.
- Review Service-restrictive policies for medical mission selection – send the right person on a tasking assigned/attached to the organization based on qualifications and experience, regardless of the component (AC/RC) or Service designation.
- Open up command and senior staff assignments for the Services and the Reserve Component to compete equally, eg. Cdr, CoS/DCA, DCCS, etc.
- Provide for common base medical logistics/acquisition support, as well as CIF equipment authorization line item listing for all components assigned to a MEDCEN/MTF, augmented with Service-specific equipment items as needed, eg. specialty gear for capability specific missions, etc.
- Provide for a joint professional and operational training budget based on all assigned and attached personnel. This would include: Ammunition, professional Continuing Medical Education (CME), Officer and Non-Commissioned Officer (NCO) development, and civilian development/training that is separate from hospital operational funding for patient care. This would also include a line-item CME/training budget for RC augmentees assigned/attached to a MEDCEN.
- Provide a Joint Graduate Military Education Department/Office at all MEDCENs and MTFs. At smaller MTFs, augment the Credentialing Offices to manage this function.
- Designate all MEDCENs as Joint Academic Teaching Centers.
- Totally integrate the finance/pay systems and Personnel systems, including the Reserve Components of each Service. The antiquated RC finance system paradigms are no longer valid. The RC will no longer be the weekend warriors of the past. The Reserve Components are fully integral elements of the operational force. Fixing the finance systems will close the loop on many issues regarding personnel, pay, and benefits.

- Provide opportunities for joint training with other Services. The medical communities grow up in Service stovepipes[76] and hence often have little joint background working with other branches or Services. We must learn to operate jointly with others.
- Improve and integrate the Information Management (IM) systems, eg CHCS/AHLTA with the VA for continuity of care – Technology systems improvements, eg. CHCS II/AHLTA in electronic patient medical records. The Joint Commission regularly cites the MHS and MEDCENs in this area for not having a truly world-wide integrated system with the VA. Other idiosyncrasies exist in AHLTA: eg., one cannot enter "Commander" for LTC/O5. The system as currently designed is not Navy friendly. And entering Captain is ambiguous for Army, Navy, AF, etc. O3 or O6?
- Retain and provide as much direct care (in-house MEDCEN) capability as possible to beneficiaries and limit healthcare outsourcing/supplemental care. Direct care is very important for keeping up the skills of medical providers when they deploy into theater.[77] This also provides a patient care population base for clinicians and other providers to maintain clinical acumen and maintain the clinical training programs within our MEDCENs, as well as providing MHS care to Service beneficiaries.
- Recognize and celebrate the Service unique differences and culture. Plan to staff officers in Service immaterial positions as well as opportunities for cross-service placement. Learn from each others' entrepreneurial clinical and research efforts and extract the best business practices/models that support the most efficiency and service to our beneficiary population.
- As Officer Professional Development Models (OPDM) are formed for the future and qualification tracks are built to cross the joint divide, while at the same time training fully grounded and Service capable personnel, consider alternating assignments in service specific and joint assignments. Eg. AMEDD officers would be grounded in providing HSS to the land warrior at levels I and II as a mandatory initial assignment before being assigned to a MEDCEN. MEDCENs' manning documents would not have O1-2 positions. This same concept should be considered for the Navy and Air Force units and their service-unique healthcare missions.

Epilogue/Conclusion

Currently, functional integration into one single entity is a preferred future goal of the MHS and subsequently of the joint MEDCEN. This functional integration is being done extremely well at LRMC—but we can do more. BRAC is forcing changes to the military healthcare system,

changes that are not unlike those that occur in any civilian healthcare system merger, whereby corporate cultures are merged. Merger of cultures within corporate medicine, while painful at times, has strengthened many organizations.

Each of our Services has its own culture, which drives their doctrine. We have to understand this concept in order to work together jointly. Changing the service cultures, those that are built upon the stove pipes and parochial culture biases within the MTFs, may be the most difficult and bring the most challenges to building the joint medical organizations. But, it can be done. The intrinsic core culture of medicine and the provision of healthcare must take precedence over service cultures; this professional culture will dominate the joint enterprise. Attempts to enjoin our Service medical forces should be viewed through new lenses. We must consider how we can leverage our Service-unique cultures for the benefit all of our warriors, our families…our patients.

BRAC– love it, hate it or indifferent – whatever the perception, it will fundamentally change the way the medical Armed Forces interact and operate at all levels. BRAC, and its related concomitant joint medical communities in which we will operate, will reduce the stovepipes and mandate integration. For some, this will be very uncomfortable. Others will be pleasantly surprised at how much more the Services are alike than different in strategic management and approaches to daily HSS operations.

So, is joint medicine better medicine? For level IV/V HSS, like the joint environment of LRMC, jointness offers many distinct advantages, such as economies of scale and an incredible mutually shared organizational culture of collegiality that has to be felt to be understood. Level III HSS in the peacetime training exercises of the RC and the wartime battlefields of today's OIF/OEF environment have provided an exceptional operational view of how joint medicine can optimally work—and work well. We will find that we are closer than we realize in joint operations and will likely find more innovative ways to enhance our interoperability and jointness.

For this new medical jointness, perhaps simply embracing the concept of the joint environment is enough. Some would say the official designation of "being joint" would make for better joint medicine, but that remains to be seen. Our Services are on a path where the "joint designation" may be considered the gold standard for military interoperability. Indeed, many Service organizations have been on the joint path for some time, and many are already there, like LRMC. They have arrived but without the coveted title of "joint organization" designation. If we are already functioning jointly, why not assume the label?

And what of the UMC concept? VADM Donald C. Arthur, Surgeon General of the Navy, has indicated, "the new guidance challenges us to do things uniformly, without a unified

command."[78] There will be a lot of negotiation ahead, suggested Arthur.[79] Nonetheless, "unified medical processes represent the future of military healthcare."[80] Although the UMC appears to be presently deferred, this does not mean that the concept cannot be revived at a future date. Adhering to the principle of unity of command, perhaps as part of a UMC, is a necessary organizational construct in corporate business practice and, critical in the joint world of military operations. Delivery of military health care services should be no different.

Endnotes

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[38] Ibid.

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[42] LRMC has also been able to negate some of the service centrism in the past by requiring staff to wear the BDU. With few distinctions, it was difficult to tell who was from what service (Army or Air Force) initially. With the recent revisions of the field uniforms for the Army, Navy, USMC, and AF, the solution to wear field uniforms may be ineffective, and in fact, may accentuate differences that LRMC was originally able to blur.

[43] Addison, 153.

[44] It's important to note that in Europe at the time, all Army hospitals were numbered hospitals, basically a Modified Table of Equipment (MTOE) organization embedded within the Table of Distribution Authorizations (TDA) element that was the patient care facility. This "embedding process" often competed for missions and resources within the hospital, eg. for training, staffing, budgets, and other resources.

[45] Addison, 143.

[46] Ibid, 155.

[47] Ibid, 157.

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[78] Philpott.

[79] Ibid.

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