Foreword

In business, a pivot signifies a strategic change to speed up growth, address increased competition, or enter niche markets. To do this, a business must know itself; its industry; and the abilities and skills of its smaller, independent subsidiaries and divisions. In basketball, a pivot by a player allows freedom to maneuver, considers possibilities, and makes space for execution. Organizations that maintain good strengths, weaknesses, opportunities, and threats (SWOT) analyses can pivot when the environment changes and an unexpected challenge presents itself. Organizations that do not maintain SWOT abilities may miss chances to provide rapid-response evaluation and implement capabilities for an emerging need or threat. This document outlines the Medical Readiness and Training Command’s (MRTC) seamless pivot from planning and performing large-scale medical collective training events to leveraging core competencies to continue to enable the Department of Defense’s (DOD) ready medical force through observation, analysis, and entry of lessons learned into the Joint Lessons Learned Information System (JLLIS). Recommendations from the MRTC include operational and strategic improvements. Some of these improvements are newly learned as a result of MRTC’s response to COVID-19, while others exercise and implement policies and procedures that are in place but have been neglected. The worst lessons learned are those that are lost.

Lessons Learned

“This who cannot remember the lessons of the past are doomed to repeat them.” (George Santayana, The Life of Reason: Reason in Common Sense, Scribner’s, 1905, page 284).

This lesson comes from George Santayana, who understood that studying history is necessary to avoid repeating mistakes. Capturing lessons learned from all aspects of military operations and applying those lessons to future missions are key aspects of Army doctrine. The Army seeks to avoid repeating mistakes made in training and in real life through this formal process. The MRTC captures lessons learned from Army Reserve medical units during annual training events and provides those lessons in a repository in JLLIS for all within the DOD and federal agencies to view.

In the spring of 2020, the MRTC was preparing for five major training events to be conducted over the coming summer months. These training events were to take place at key United States Army Reserve (USAR) training sites and included thousands of Soldiers, Joint partners, and multinational countries across all Components (COMPOS) of the Army. The three Army COMPOS include the Active Component, the Army National Guard, and the Army Reserve.

As the year progressed, a virus was detected in China and began spreading to other countries around the world. By the end of the second quarter, fiscal year 2020 (FY20), the virus became a worldwide pandemic and forced the closure of multiple cities, states, and countries. As a possible postponement of the USAR's annual training exercises and a growing USAR medical response to the pandemic, the MRTC’s priority of planning leaned toward exercise support but then pivoted to pandemic response.
Mission Command

MRTC’s mission is to execute Mission Command of three Medical Training Brigades (MTBs) and three Regional Training Sites-Medical (RTS-MED) that provide the collective and sustainment training to prepare medical units to conduct Health Service Support (HSS) across the full range of military operations. See Figure 1 for information on the MRTC’s organizational structure.

The MRTC, a subordinate organization under the Army Reserve Medical Command (ARMEDCOM), is stationed on Joint Base San Antonio Fort Sam Houston, TX (JBSA FSH, TX). It is the sole USAR medical training institution that provides both individual and collective training opportunities for medical rotational units either on-site or at one of its primary RTS-MEDs. The MRTC is also partnered with the Medical Center of Excellence (MEDCoE) proponent for all medical training across the Army COMPOS in developing the RTS-MED program. The program provides integrated combat HSS and force health protection (FHP) to the USAR and DOD activities, which assists commanders with training development, management processes, and needs assessment. See Figure 2 for more information about regional training sites-medical.

To provide medical forces with the skills to save lives on the battlefield, medical personnel need to be trained in their military occupational specialty (MOS) for enlisted or area of concentration (AOC) for officers, both individually and collectively. Medical personnel from all Army COMPOS and other branches of service receive first-class training through the MRTC. The MRTC delivers training by executing its mission through its three medical training brigades. These brigades are located at Fort Gordon, GA; Salt Lake City, UT; and JBSA FSH, TX. The RTS-MEDs are located at Fort Gordon, GA; Camp Parks, CA; and Fort McCoy, WI. The MRTC collaborates with various institutions such as the MEDCoE and the Mayo Clinic to conduct medical training. Once medical organizations have advanced through training, they participate in a Global Medic (GM) exercise to be evaluated on their performance and validated by First Army at a mobilization site. See Figure 3 for more information about how MRTC executes its mission.

The MRTC is a force and training multiplier, which increases the ability of a unit of any size to accomplish a task. As a key organization in the Army Reserve, it is responsible for executing medical training in all phases of the sustainable readiness model (SRM), culminating in the collective training preparation of all medical functional area (MFA) units for deployment in the mission module of the SRM.
The mission module consists of units assigned to an ordered mission. Units should be validated, fully resourced, and ready to conduct decisive action (continuous offensive, defensive, and stability support of civil authorities’ tasks) operations if required. Understanding the significance of such a responsibility, the MRTC developed and follows a schematic outlining such tasks. The schematic shown in Figure 4 identifies the MRTC’s enduring priorities, lines of effort, and final outcomes, which result in the end state of enabling the nation’s ready medical force.

**Learning Lessons: The Annual Training Exercise**

The GM exercise is conducted twice a year at Joint-certified training sites, including Fort Hunter Liggett, CA; and Fort McCoy, WI. It is linked with the USAR Combat Support Training Program (CSTP). The MRTC is responsible for organizing and executing all GM exercises, spanning several U.S. states and using a notional outside continental United States (OCONUS) scenario.

Joint medical units are organized under the Joint Task Force-Medical (JTF-MED) Operational Command Post (OCP). The primary ground medical training audience is organized under a U.S. Army Reserve medical BDE, which is supplemented with the United Kingdom, Canadian HSS, Australian, New Zealand, and German Armed Forces.
Participating units are assessed on their mission essential task list (METL) and achieving METL training with combined Joint operations in a realistic environment (live, virtual, constructive, gaming, and training enablers) that includes the appropriate elements of Joint content. Training events are derived from Commander’s Training Objectives (CTOs), the directed Joint METL (JMETL), and METL. The events are focused on the units’ doctrinal mission. Observations, evaluations, and assessments are documented in JLLIS. Each participating unit is assigned a team of observer controller/trainers (OC/Ts) to evaluate the unit’s CTOs during the field training exercise (FTX) portion of the GM exercise. Each OC/T team is managed by an experienced colonel or lieutenant colonel called a chief, observer controller/trainer (CHOT). The CHOT provides reports to the senior CHOT, who manages the observation collection process for all units in the exercise. The exercise director (ED) and deputy exercise director (DED) receive daily reports of the units’ status toward achieving training objectives.

Every year, more than 2,700 personnel participate in the GM exercise as rotational medical training units, real-world medical support, OC/Ts, and exercise control support staff. Personnel collaborate to deliver synchronized Joint, multicomponent, and multinational expeditionary healthcare to meet combatant commander requirements in a complex and large-scale operational environment.

The Medical Exercise Support Battalion (MESB) of the MRTC provides medical simulation for the exercise in the form of live role players in higher, adjacent, lower, supporting, and supported medical units on the battlefield. The MESB also provides an analyst cell to conduct a tier 2-level quality control and review (QCR) of written observations of the unit’s training.

Figure 3. Executing the mission. Source: LTC Robert Garcia, S3, 3MTB, MRTC and MSG Robert James, Senior Operations NCO, G-3/5/7, MRTC
The Chairman of the Joint Chiefs of Staff (CJCS) initially designated GM as a JNTC-accredited program in 2012 and reaccredited it in 2017. The GM program is organized, resourced, and recorded in the Joint Training and Information Management System (JTIMS) and JLLIS by the MRTC in coordination with Forces Command (FORSCOM) and the United States Transportation Command (USTRANSCOM). In 2017, the GM program accreditation oversight was transferred from USTRANSCOM to FORSCOM under Department of the Army Military Operations–Training Requirements (DAMO-TR).

In 2018, the GM program was identified by FORSCOM directorate of operations, plans, training, and force protection (G33) and selected to serve as the exercise to conduct an emergency deployment readiness exercise–medical exercise (EDRE-MEDEX).

In 2019, the GM program was identified and selected to conduct another EDRE-MEDEX. This time, the GM program was integrated with a National Training Center (NTC) rotation, the Sierra Army Depot, and the Brooke Army Medical Center. The exercise practiced medical transport from the point of injury to a Level IV hospital for treatment. Level IV hospitals are in the uppermost tier of patient care.

Joint Lessons Learned Information System: A Repository for Lessons Learned

The MRTC uses JLLIS, the DOD's system of record database, to capture observations, best practices, and lessons learned. JLLIS is an automated knowledge management system and repository that facilitates the collection, tracking, management, sharing, collaborative resolution, and dissemination of lessons learned to improve the development and readiness of the Joint Force.

The MRTC has been using JLLIS by way of the GM learning model for many years, incorporating two tier levels of QCR for all JLLIS entries. The MRTC produces assessments; documents proficiency ratings of performance tasks; creates a final exercise report and take home packages for participating units; and ties in captured data to identify doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P) initiatives and deficiencies. For more information about the GM learning model, see Figure 5.
What makes the MRTC unique is its ability to apply the same applications, functions, and processes used in JLLIS to any event, including real-world pandemics like the COVID-19 virus. The MRTC captured all data (direct and indirect collections) in an approved and standardized format, submitted entries in JLLIS through the two tiers of QCR, validated information, and produced a final mission report. The final mission report annotated DOTMLPF-P and medical function trends. The 3rd Medical Training Brigade (3MTB) was given the mission to lead this MRTC COVID-19 response effort.

Structure
(See Figure 1 for more information on organizational structure.) At the beginning of 2020, the 3MTB was immersed in the planning of two GM exercises, which included two firsts for the training platform: the participation of the 18th Medical Command, a multi-component organization; and the addition of the Main Command Post (MCP) of the 3rd Medical Command (Deployment Support) (MC[DS]). These new training initiatives, in addition to the standard exercise requirements, stressed the resources and capabilities of the BDE’s planners before talk of real-world mission capabilities arose.

COVID-19 Response: Developing the Courses of Action

The 3MTB relied on its exercise experience as the staff began planning the best courses of action (COAs) to collect lessons learned from the USAR’s pandemic response. In late March, the BDE knew little about the USAR’s specific medical response plan other than medical professionals from the three reserve medical commands; 807th MC(DS), 3rd MC(DS), and ARMDCOM would mobilize to provide medical care in COVID-19 hot spots around the country. The 3MTB planners knew the COAs would require the flexibility to adapt to the emerging medical requirements and a scope broad enough to capture lessons from multiple sources. A key consideration for planning was the Stop Movement order directed by the Secretary of Defense, which halted all travel by DOD personnel. Because of this, the COA would require a virtual collection capability. Three COAs emerged around the restriction of travel: a purely virtual collection plan, a small mobile team concept, and one with a hybrid capability of virtual and mobile collection capabilities. Although on-site and in-person observation collection was preferable, it was unknown if the 3MTB mobile teams would be granted exemptions to the Stop Movement order. Therefore, the third COA was selected for its flexibility and potential for in-person observations. The BDE commander directed deliberate risk-mitigating strategies for all phases of travel.

To address the flexibility and scope issues, planners incorporated the Army Medical Department’s 10 Medical Functions from the Army Techniques Publications (ATP) 4-02.42, Army Health System Support to Stability and Defense Support of Civilian Authorities Tasks, June 2014, and FM 4-02, Army Health System, November 2020, as the framework for which observations would be collected and reviewed. The observation teams organized into subject matter experts (SMEs) in each of the medical functions and received lessons learned from the reserve medical organizations supporting the pandemic. These medical function area SMEs also evaluated each observation for implications to the Army’s DOTMLPF-P system to recommend changes for future missions.

Designing a New Organizational Structure Based on Current Competencies

The 3MTB relied on previous experience in collecting observations during USAR’s annual combat support training exercise (CSTX) and GM exercises to build pandemic response observation teams and teams to conduct the QCR of observations entered into JLLIS. The BDE was uniquely poised to manage this mission as the only BDE under the MRTC to have two Medical Training Support Battalions (MTSB) and an MESB, which combined to perform data collection and quality control of lessons learned. The battalions were able to fill the personnel requirements despite the exemption of several Soldiers because of their status as medical professionals and other key persons...
to their civilian employers. In addition to the three battalions, the BDE staff was restructured to support the new mission and placed under management of the deputy commanding officer (DCO). The unit adopted a modified exercise structure in place of the traditional BDE command and control (C2) because the new mission shared many similarities with the BDE’s annual CSTX and GM mission. Upon execution, the BDE followed the battle rhythm conducted during a CSTX and GM mission. This battle rhythm included a daily situation report (SITREP), daily meetings between CHOTs and SMEs, and a battle update brief (BUB) to the BDE commander three times a week. See Figure 6 for more information on the COVID-19 response structure.

The MTSBs organized into SME teams in the 10 Medical Functions under the control of the senior CHOT and the CHOT. The battalion commanders served as senior CHOTs, providing reports, updates, and trends to the BDE commander while the CHOTs managed communications with the observation sites to identify opportunities to capture observations and lessons. Observations were passed to the SME in the corresponding medical function area. SMEs communicated with points of contact at the observation sites to understand the issues and concerns before entering the observation into JLLIS. The 7302nd MTSB received orders to support units under the 807th MC(DS), including the operational command post, Urban Augmentation Medical Task Forces (UAMTFs), and direct reporting units (DRU). The 7307th MTSB provided observation teams to 3rd MC(DS) units and those under ARMEDCOM. Each battalion maintained a team of ready SMEs that could mobilize on short notice to collect emerging lessons.

Although the 7306th MESB was capable of performing many functions in the annual CSTX and GM, performing tier 2-level QCRs of observations in JLLIS was required. The 7306th Battalion Commander served as the chief analyst and provided reports, updates, and trends to the BDE commander. The battalion mobilized its JLLIS analysts and organized them into two teams with one supporting each of the MTSBs. An officer in charge (OIC) was assigned to each team to coordinate with the corresponding MTSB CHOT and rectify issues between the analyst and the SME. A new JLLIS format was required because of the differences in the way pandemic and exercise observations were evaluated,

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**Figure 5. Global Medic learning model. Source: LTC Robert Garcia, S3, 3MTB, MRTC and MSG Robert James, Senior Operations NCO, G-3/5/7, MRTC**
which made JLLIS the number one priority when analysts and SMEs were first mobilized.

**Recommendations**

The DOD joined a host of organizations, agencies, private partners, and countries to respond to the pandemic and address the global health crisis. The effort became a Joint-Interagency-Intergovernmental-Multinational (JIIM) response and an opportunity to learn lessons and build a better, more agile response plan for the future. Responding to a threat of this magnitude will likely never occur again without a JIIM medical formation, therefore forces need to:

- Embed observers and analysts with the disaster response medical forces at mobilization sites.
- Emphasize familiarization and relationship-building with these partners prior to injury, sometimes referred to as “left of the boom.”
- Maintain a ready medical force for both wartime and peacetime operations with senior leader emphasis and support for programs such as the GM.
- Use mobilization force generation installations (MFGIs) to form and begin to normalize the medical capabilities that are mobilized.
- Add these medical capabilities to the EDRE-MEDEX program to beta test them.

Lessons captured by MRTC are essential in preparing today's forces in order to shape tomorrow's response.
Conclusion

From exercise lean to pandemic pivot, the 3MTB and MRTC successfully readjusted priorities to meet commander's intent. The 3MTB went from being an exercise support in CSTX and GM to collecting lessons learned in a real-world environment, using existing knowledge and capabilities, and identifying DOTMLPF-P initiatives and deficiencies aligned with medical functions to prepare the Army Reserve medical forces for future pandemic threats.

End Note: The mission of the Army Medical Department (AMEDD) as specified in AR 40-1, 1-7a, is to maintain the health of the Army and conserve its fighting strength. Care is provided for eligible personnel in peacetime and, at the same time, preparations are made for health support of the Army in time of war, international conflict, or natural disaster. Lessons are available in JLLIS.