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ABSTRACT

As SARS-CoV-2 spread throughout the world military units had to develop ways of combating risk to ensure force health protection and deployability of their soldiers. Medical functions were impacted and solutions needed to be found in order to incorporate these items as functioning medical platforms. In the following article, we address one unit’s individual response to the difficulties faced as a Military Police Brigade in Europe. Lessons learned from the initial wave of COVID-19 across medical operations, medical readiness, virtual health, and behavioral health initiatives can be utilized for better planning and response in the future.

Keywords: SARS-CoV-2, COVID, medical functions, medical operations, medical readiness, behavioral health

INTRODUCTION

As the SARS-CoV-2 virus (COVID-19) spread across the globe in early 2020, it directly affected individuals and societies. Not immune to this was the US military community and the 18th Military Police (MP) Brigade (BDE), who changed and adapted methods and operations in order to meet mission requirements while working to stop the spread of COVID-19. Planning a comprehensive response to COVID-19 was challenging across the 10 Medical Functions, given the inherent uncertainty that comes with a pandemic brought about by a novel pathogen. The 18th MP BDE Surgeon Cell is the BDE medical cell consisting of one physician, one medical operations officer, one physician assistant, one senior combat medic, two behavioral health providers, and two enlisted behavioral health technicians. During the COVID-19 pandemic the Surgeon Cell faced significant challenges when first planning a response due to the BDE being geographically assigned across four European countries, with short and long term missions occurring in additional countries in Europe and Africa, and without comprehensive organic medical support. A “team of teams” approach was taken in order to distribute work among the Surgeon Cell, based on expertise and experience, while maintaining a multi-focused approach to the pandemic response. Lessons learned from the initial wave of COVID-19 across medical operations, medical readiness, virtual health, and behavioral health initiatives can be utilized by the 18th MP BDE and other military units to more effectively plan and respond to future pandemics in order to preserve combat power.

MEDICAL OPERATIONS

Challenges in medical operations and the lessons learned from those challenges during 18th MP BDE’s initial COVID-19 response are most easily categorized into the medical logistics and medical mission command functions. The BDE Surgeon Cell (BDE Surgeon, Active Duty Operational Support – Reserve Component (ADOS) Physician Assistant (PA), Medical Operations Officer (MEDO), and Non-commissioned Officer In-Charge (NCOIC)) worked across multiple functions in order to source proper personal protective equipment (PPE), develop tracking mechanisms, and synchronize reporting efforts across the BDE. All challenges faced in these functions were solved primarily through coordination between staffs and open communication with subordinate units.
Initial Brigade Outreach: One of the first priorities for the Surgeon Cell was to provide education to the formation. This was done by educating leaders during medical portions of leadership meetings as well as producing fliers and handouts which were printed and posted throughout the BDE buildings and workspaces. These informational handouts were also posted on the BDE social media. Educational outreach continued throughout the initial COVID-19 response.

Medical Logistics: As COVID-19 cases began to rise in Italy in early to mid-March 2020, the Surgeon Cell and BDE Staff recognized a need to source PPE for soldiers in the formation. Military Police (31B) soldiers working law enforcement (LE) missions routinely interact with the general public, putting them at heightened risk to exposure to COVID-19. Lessons from Korea, where COVID-19 first impacted Department of Defense (DoD) forces, showed that soldiers, regardless of MOS, had been tasked to support installation gates for screenings to limit potentially infected personnel onto posts. There was a clear need to source and distribute PPE to 18th MP BDE soldiers. The BDE had little to no PPE on hand beyond a few hundred N-95 masks used for engineering operations and a few boxes of gloves for medics in each MP Company prior to the COVID-19 pandemic.

Two immediate challenges presented themselves in sourcing PPE. First, there was a need to determine type of PPE needed and the quantity required by each subordinate unit across the BDE based on respective missions. The BDE risked over or under-ordering without understanding these requirements. Second, there was a need to source the PPE required during a time of incredible demand from the DoD and private business from across the world.

Communication with the higher headquarters’ Surgeon Cell was critical in resolving the first challenge. 21st Theater Sustainment Command (TSC) provided 18th MP BDE with a EUCOM “PPE Priority Matrix” to assist with prioritizing and determining quantity and type of PPE to order. The matrix created six groups of similar jobs/duty positions that had suggested quantity and type of PPE based off of their risk of exposure to COVID-19.

Coordination between and across staff sections was necessary once the matrix was completed. The BDE Surgeon and MEDO created a sheet for each type of unit in the 18th MP BDE and their required PPE based off of anticipated missions during the COVID-19 response. The Surgeon Cell NCOIC was then able to provide National Stock Numbers (NSNs) for all of these items and associated costs to coordinate funding with the S8 (resource management section). Each company senior medic was then provided the ordering sheet and ordered items through the Theater Enterprise-Wide Logistics System (TEWLS). In all, the BDE was able to conduct analysis and order PPE (N-95 masks, surgical masks, gloves, gowns and face shields) for a 45-day period of continuous need.

The second issue, that of sourcing the equipment, quickly became evident shortly after placing the PPE on order through US Army Medical Materiel Center- Europe (USAMMC-E). USAMMC-E continued to list PPE items as back-ordered for several months due to historic levels of demand. As a result, it was clear that the initial order would not arrive in enough time for soldiers in 18th MP BDE to utilize that equipment during the initial COVID-19 response. Regional Health Command - Europe (RHC-E) and Medical Department Activity-Bavaria (MEDDAC-B) both had contingency stocks of PPE, but attempts to earmark PPE for LE first responders from this stock were not supported given their need to conserve PPE for medical providers. Further challenging was the lack of a plan from Installation Management Command (IMCOM) and garrison commands to issue PPE to their respective LE units.

Overcoming this sourcing challenge again required coordination between the staff sections, particularly with the S4 (logistics). First, the Surgeon Cell decided to re-distribute a majority of the on-hand OSHA N-95 masks from 15th EN Battalion (BN) amongst the MP Companies. Leaving behind roughly 100 masks for the 15th EN BN, the additional 700 were better suited as contingency stock for roadable MPs given their first responder mission. In conjunction with BDE and BN S4 (logistics) sections, a distribution plan was developed to send those masks across Europe and to the companies. Last, government purchase card (GPC) purchases for basic cloth masks, gloves, and cleaning supplies were conducted with logistics section support and distribution to provide a stock of PPE until the items ordered through USAMMC-E arrived. While IMCOM would have ideally taken ownership of sourcing MPs serving in a Directorate of Emergency Services (DES) role, this internal solution did provide adequate protection to 18th MP BDE Soldiers during the COVID response.

The initial wave of COVID-19 in mid-March 2020 showed a need for the 18th MP BDE to order and maintain a reasonable amount of PPE, namely masks and gloves, in preparation for potential future waves to avoid waiting for back-ordered equipment. Coordination between staff sections and the higher headquarters to purchase and distribute locally sourced items demonstrated an acceptable alternative course of action in the event that the USAMMC-E backlogs. A stock of on-hand PPE
for first responders in the future will likely be the end result of this pandemic response.

**Reporting, Battalion Medical Representatives, and Patient Tracking:** While a medical logistics challenge was certainly the first visible issue during the BDE Surgeon Cell’s response to COVID-19, medical mission command issues quickly took the bulk of the time and effort for the staff. Daily patient tracking reports for soldiers testing positive, tested for, or with potential exposure to COVID-19 became a requirement within the BDE and higher-level organizations as the pandemic more seriously impacted Europe. This information requirement brought about two specific challenges for the Surgeon Cell: how the BDE would receive patient information from units spread across Europe and developing a format in which that information would be reported.

The BDE had its first few patients that required tracking and reporting in mid-March. These soldiers did not have positive COVID-19 tests but did require tracking per US Army Europe requirements due to concerning symptoms. These first patients presented the initial medical mission command issue to the Surgeon Cell as pieces of information and reports of soldiers being tested were coming directly from company commanders to the BDE Surgeon, bypassing the BN assets who were often left in the dark. This ultimately led to incomplete or dual reporting that was confusing for multiple parties. Unlike a Brigade Combat Team (BCT), MP BNs lack BN MEDOS, Surgeons, and PAs, so communication between BDE medical assets and subordinate units often results in reaching directly to company senior combat medics. While unusual, this is normally an effective way to communicate and resolve routine issues. Given the constant need to update the BDE staff on new patients the practice was not effective during a pandemic.

With the assistance of the BDE S3 (operations), the BDE Surgeon Cell created a reporting matrix with seven specific Commander’s Critical Information Requirements (CCIR) and COVID-Reporting requirements. This matrix provided clarity on when and to whom a commander needed to report a patient based on that soldier’s situation, exposure, symptoms, and other situationally pertinent data. The creation of the reporting matrix was critical in the BDE’s success in tracking and reporting accurate patient information during the COVID-19 response. It effectively established needed medical mission command procedures to standardize reporting criteria ensuring patient information flowed from a single source at the BN level.

A spreadsheet product was created enabling the BDE Commander (CDR) to visualize the number of patients currently being tracked (Figure 5). Anticipated return to duty (RTD) times were calculated giving the leadership visibility of the impact to LE power in each unit location. This tracker was published each morning at 0600 and 1700 to provide the BDE CDR with the most updated understanding of COVID-19’s impact on his formation. Establishing those reporting times was important to create a steady battle rhythm in an uncertain time, and creating a robust product made it much easier to track the formation accurately.

Last in medical mission command lessons-learned from the patient reporting and tracking focus was the establishment of twice-daily medical syncs and BN-level “medical representatives.” As COVID-19 became much more serious in late March and into April, the number of patients being tracked at the BDE level reached a point such that the receipt of COVID-19 Reports/CCIRs to the BDE was difficult to track by the Surgeon Cell alone. The typical medical administration function was not, at first, clearly defined below the BDE without BN MEDOS. The BDE began conducting twice daily teleconferences with BN medical representatives to receive the most accurate information from companies on the ground to fuel patient reports. These representatives (in 709th MP BN a senior combat medic and in 15 EN BN a Physician’s Assistant) provided critical information to the BDE Surgeon Cell, ultimately ensuring that BDE and BN information was synchronized and patient’s information was accurate. It will be critical that BNs identify these representatives to provide continuity of information during future waves.

**Definitions:** One of the most challenging aspects of medical mission command experienced by the BDE during the initial COVID-19 response was categorizing/defining soldiers based on their level of exposure to COVID-19. The multiple categories of tracked individuals included soldiers with positive COVID-19 test results, close contacts of positive individuals, those tested with negative results, as well as individuals with flu-like symptoms who were of low concern for COVID-19 due to exposure and travel risk. This variety of patient categorization was important to fully understand as each had a different set of guidelines for their mandated restriction of movement and, as will be later discussed, differing Return to Duty criteria.

Immediately, it was clear that the higher headquarters, RHC-E, and US Army Europe (USAREUR) lacked a standardized set of definitions for different types of patients. As a result, different garrisons, and more concerning, different units on the same garrison, had separate definitions and categorizations of patients impacted medically by COVID-19. In a BDE with units spread...
throughout multiple garrisons in several countries, this made patient reporting very complicated.

The BDE Surgeon worked with 21st TSC to publish a set of definitions implemented for their subordinate units. These definitions were needed and provided clarity. In future waves of COVID-19 it will be critical for definitions to be standardized at a minimum at the theater/regional level in order to ensure the entire AO is operating with a shared understanding. The definitions utilized for the majority of the COVID-19 response are below. Given the conservative social distancing measures of any symptomatic person during COVID-19, the BDE implemented the “Self-Isolation” category to ensure that those individuals with flu-like illness without clinical indication for COVID-19 could still be tracked and placed in a restriction of movement (Table 1).

Return to Duty: Without information coming from higher headquarters, Public Health Emergency Officers (PHEOs), per the Senior Responsible Officer (SRO) for each Area of Responsibility (AOR), developed their own understanding of the Centers of Disease Control (CDC) guidelines. Each area developed slightly different internal protocols which became very confusing for a Brigade spread throughout the region. The most difficult situations revolved around individuals completing 14 days of isolation due to being a Person Under Investigation (PUI) and those individuals with a confirmed positive COVID Polymerase Chain Reaction (PCR) test.

An individual being isolated for 14 days with a negative test meant that there was a suspicion of a COVID infection due to symptoms and/or close primary contact. These individuals required a 14-day isolation period per USAREUR orders due to their potential risk to the population and formation. The confusion came from the different protocols per SRO area. For instance, one SRO may require retesting before return to duty, one additional retest or two depending on area, while another SRO may require 72 hours of no symptoms prior to release without a retest. There was one incidence where an area did not follow USAREUR guidance and released one family from isolation/quarantine with one negative test although all family members remained symptomatic.

The two ways a confirmed COVID positive individual could be released from quarantine was the test or no test methods. The test method required resolution of symptoms for 72 hours followed by two consecutive negative nasopharyngeal swabs 24 hours apart. The no test method required symptoms resolution for 72 hours and greater than 7 days since symptoms started. Both required a 14-day quarantine period. Although this was also SRO dependent, SRO areas utilized only these two methods. SRO protocols often changed due to testing capabilities based on supplies.

Maintaining communication with PHEOs in each SRO became critical to understanding a particular area’s protocols for return to duty. This was accomplished through senior medic communication with local military treatment facilities and, more importantly, routine communication between the Brigade Surgeon and PHEOs throughout the USAREUR AOR. Remaining flexible and continuing communication between the Brigade Surgeon Cell with PHEOs as well as with subordinate commanders was key to success. The BDE implemented a COVID-19 RTD chart that was useful in organizing most RTD scenarios onto a single page.

Contact Tracing: The need for internal contact tracing was determined early in the process. Initial training for tracing at the unit level was performed by garrison PHEOs or their alternate. It was established, by local garrisons, that the PHEOs would run contact tracings of COVID positive individuals with the assistance of a small amount of individuals trained within units. It was quickly found that waiting to contact trace positive individuals increased the number of close contacts. Internal tracing of all symptomatic individuals tested was established internally. It was found that the initial training was not detailed enough to run proper internal contact tracings. Internal training was performed through the Brigade Surgeon and a designated Brigade individual to subordinate Battalion and Company representatives. Tracing team procedures were developed to streamline the process and a questionnaire, modified from a USAG-Bavaria Public Health, publication was internally implemented.

Medical Readiness

As COVID-19 spread and the situation began to seriously impact Europe, it became clear that military treatment facilities (MTFs) would have to close for routine

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<td><strong>Quarantine</strong></td>
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<td>Exposure without symptoms. Asymptomatic, but exposed to a known or suspected COVID-19 positive person</td>
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outside, communication due to familiarity. To determine the order of

Virtual Health

Finding a way to reach soldiers for encounters was the next step. The BDE previously used the RHC-E virtual platform to reach outlying soldiers for Behavioral Health needs. When COVID-19 occurred the RHC-E Virtual Platform became the primary source of communication due to familiarity. To determine the order of

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https://medcoe.army.mil/the-medical-journal
Those reporting COVID-specific BH concerns were predominantly identified through outreach activities; consultation with commanders, chaplains, or other providers; or serious incidents. Those identified via CCIRs with BH concerns were directed to their respective area support clinics for face-to-face evaluation. All potentially high-risk soldiers were assessed face-to-face, with COVID-19 precautions in place (e.g., face masks, hand sanitizer before and after appointments, and sanitization after each patient).

Alternatively, routine evaluations, which include administrative separation and special duty assessments (e.g., recruiter, drill sergeant, CID agent, etc.), were conducted virtually. The 18th MP BDE had a virtual health evaluation policy in place prior to COVID-19, due to the geographically dispersed nature of the unit. Commanders completed the request for evaluation form. Soldiers completed a packet of administrative and screening items per Department of Defense Instruction 1332.143. Once soldiers returned the packets, they were scheduled for virtual appointments. If any safety concerns were noted in the packet, soldiers went to their area support clinics for face-to-face evaluations. At the conclusion of the assessment, in accordance with Department of Defense Directive 6490.14, commanders received documentation with appropriate recommendations via encrypted email. Overall, Behavioral Health treatment and procedures changed minimally during the pandemic. However, there were some limitations to providers’ ability to deliver services.

Treatment Limitations: Both new and established patients engaged in telehealth therapy using the RHC-E virtual health platform. Traditional talk therapy, predominantly Cognitive-Behavioral Therapy (CBT), presented minimal logistical issues. However, some treatments required additional training, supervision, and creative implementation. For example, Eye Movement Desensitization and Reprocessing (EMDR) therapy requires the therapist to conduct movements within specific parameters. These parameters, while simple to adjust in person, vary greatly depending on internet speed and size of a patient’s monitor, among other limitations. Another treatment, Prolonged Exposure (PE) therapy, involves patients engaging in “in-vivo” exposure (often shopping at busy stores, driving during high traffic hours, etc.). Given the need for physical distancing and stay-at-home orders, there were minimal opportunities for such engagement. Additionally, the risk/reward assessment for having patients leave home unnecessarily was in favor of caution. Other adjunctive therapies that require specialized equipment (e.g., biofeedback) were simply not available.

To address these limitations, Behavioral Health Officers recommended more accessible tools, such as cell phone applications (e.g., Breath2Relax5, Mindfulness Coach6), handouts/worksheets, and online education programs. These tools also serve prevention and outreach functions.

Prevention and Outreach during COVID-19: The BH team focused on three major lines of prevention and outreach efforts to reach soldiers during the COVID-19 pandemic. They were BH screening of isolated soldiers, dissemination of psychoeducational materials, and physically distanced battlefield circulation. These efforts improved overall wellness of soldiers throughout the BDE and were met with positive feedback. Efforts continued beyond the end of stay-at-home orders due to soldier interest.

Behavioral Health prevention and outreach consisted of three specific lines of effort: BH screening of soldiers in isolation and quarantine; dissemination of psychoeducational and wellness materials; and physically distanced battlefield circulation. During their daily health checks, medics verbally administered the Patient Health Questionnaire-29 (PHQ-2, a brief screening tool for depression) to soldiers in quarantine and self-isolation. When scores exceeded the recommended cutoff (four), medics notified the BH Team. Additionally, the BH Team screened all soldiers on the COVID-19 tracker for BH history within the past year. They subsequently notified commanders of all significant concerns, as well as consistent, positive PHQ-2 screens. All soldiers, regardless of their PHQ-2 score and BH history, received various psychoeducational handouts. These handouts provided education and suggestions to manage isolation-related distress.

In addition to handouts, the BH Team collaborated with the BDE Public Affairs Office (PAO) to produce weekly resiliency videos. Videos ranged from 3-7 minutes; offered tips and education on how to remain resilient and healthy while physically isolated; and utilized multiple BDE staff sections (Equal Opportunities, Sexual
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Harassment Assault Response Prevention (SHARP), Family Readiness Support Assistants (FRSA), and Unit Ministry Team (UMT)). Each week the BDE PAO posted a resiliency team video with a similarly themed brief yoga practice to BDE social media. The BH team led these efforts, leveraging access to social media to ensure wellness during the pandemic.

Soldiers in essential positions continued to work during the pandemic. Their wellness needs were met via physically distant battlefield circulation. Utilizing safety precautions like facemasks, regular handwashing, and maintaining a minimum of 6 feet of space between people, allowed the BH team to visit soldiers in their work environments. Most circulation occurred around motor pools and company headquarters. During circulation, the BH team received first-hand accounts of soldiers’ responses to COVID-19 restrictions. It also served as an opportunity to provide information and resources (e.g., stress balls, mindfulness coloring books, handouts) to soldiers.

Prevention and Outreach Limitations: The BH team developed creative methods to reach out to soldiers during the stay-at-home phase of COVID-19. However, there were some limitations. First, screening measures helped identify potential BH issues, yet they were not sufficient for thorough assessment. In addition, fliers, resiliency videos, and yoga videos were available only on the BDE social media page. This meant that only soldiers who followed the page would be able to access these resources. While some limitations existed, the outreach and prevention program was, overall, effective for combating the negative BH impacts of COVID-19.

CONCLUSION

Utilizing a “team of teams” approach was imperative to separating and maintaining focus on several different objectives simultaneously within the Surgeon Cell. This approach allowed the medical team to match expertise with correct tasks. This allowed the BDE Surgeon time to maintain contact with commanders and health experts at multiple different garrisons throughout Europe while overseeing Surgeon Cell operations and keeping the BDE Commander informed at all times. It further allowed for prevention and outreach services to all impacted to continue, minimizing secondary and tertiary effects. Through this method, the Surgeon Cell was able to have an impactful COVID-19 response while maintaining medical readiness so that the military policing and engineering capabilities remained viable in the European theatre of operation.

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