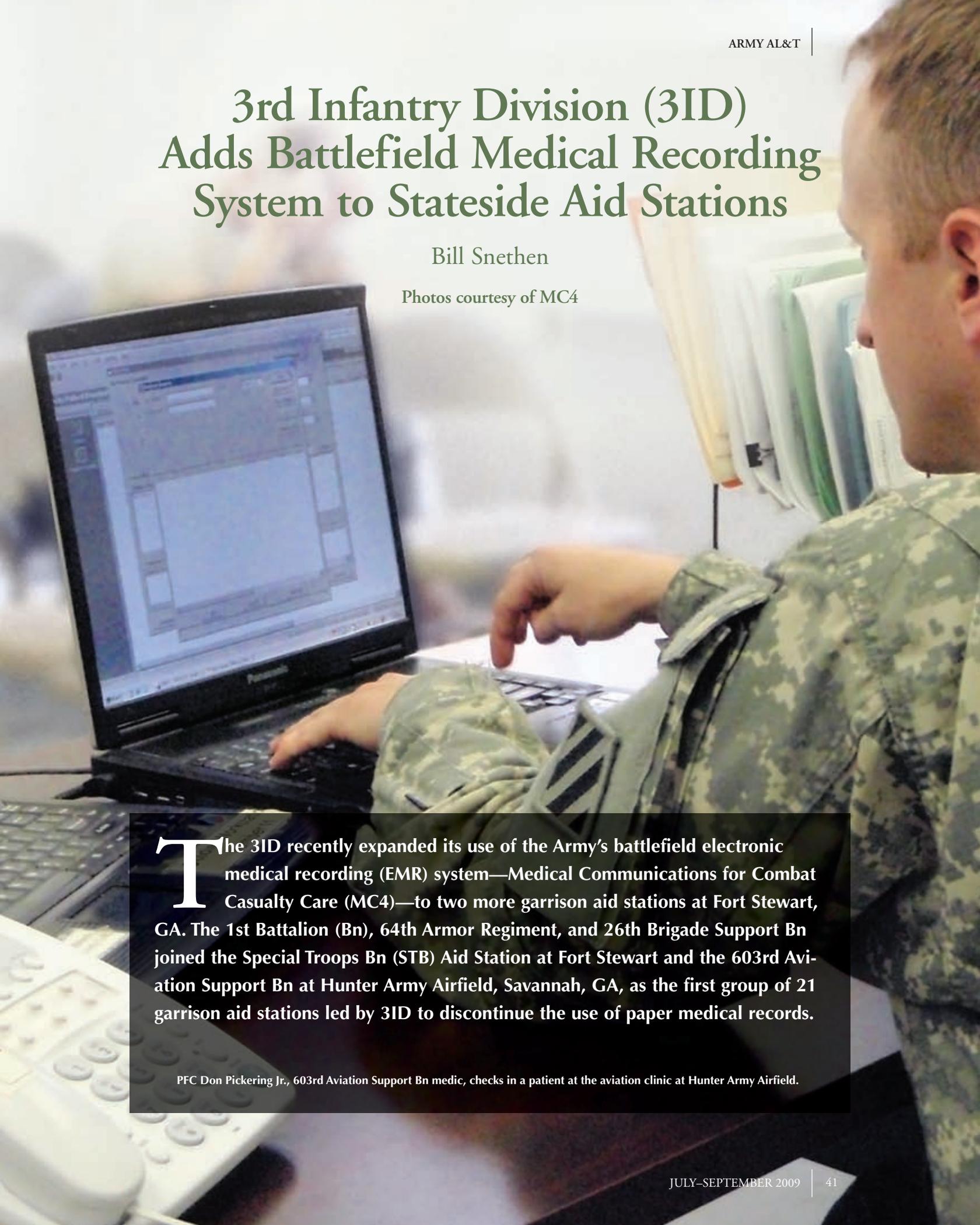


3rd Infantry Division (3ID) Adds Battlefield Medical Recording System to Stateside Aid Stations

Bill Snethen

Photos courtesy of MC4



The 3ID recently expanded its use of the Army's battlefield electronic medical recording (EMR) system—Medical Communications for Combat Casualty Care (MC4)—to two more garrison aid stations at Fort Stewart, GA. The 1st Battalion (Bn), 64th Armor Regiment, and 26th Brigade Support Bn joined the Special Troops Bn (STB) Aid Station at Fort Stewart and the 603rd Aviation Support Bn at Hunter Army Airfield, Savannah, GA, as the first group of 21 garrison aid stations led by 3ID to discontinue the use of paper medical records.

PFC Don Pickering Jr., 603rd Aviation Support Bn medic, checks in a patient at the aviation clinic at Hunter Army Airfield.

The implementation of the digital medical recording system by 3ID, and the 82nd Airborne Division at Fort Bragg, NC, in January, has resulted in capturing 3,000 electronic patient encounters in garrison. The use of MC4 at battalion aid stations in the U.S. not only provides an EMR capability for clinics with low-to-no connectivity, it also supports a new initiative by the Army to “train as you fight” with MC4.

LTC Edward Michaud, 3ID surgeon, ushered in the new business process so that personnel supporting the facilities would gain valuable hands-on experience using the same equipment to electronically document patient care in garrison that is used in theater. The laptops and servers used in the stateside clinics—fielded, trained, and sustained by the MC4 program—are the same used by medical personnel and supported by the technical staff of signal officers (S6) and the Combat Service Support Automation Management Offices (CSSAMOs) in Iraq, Afghanistan, and 12 other countries.

“The primary benefit of this endeavor is the training and habituation that improves through continued use,” Michaud said. “Utilizing the EMR

system on a daily basis in garrison reduces future training requirements and helps to eliminate any delay service members may experience in receiving medical care. Also, the S6 and CSSAMO are better prepared to efficiently install and support the system, as well as troubleshoot any issues that may arise.”

In addition to training, Soldiers who visit the clinics in garrison also benefit from the use of MC4. “The staff is able to provide enhanced care since they now have the ability to quickly access historical information and view previous illnesses and treatments,” Michaud said. “Without EMR, aid stations primarily screen patients. Today, 3ID has four aid stations with the ability to electronically capture patient encounters, document notes, and reorder medications. Use of the MC4 system offers a significant benefit to the Soldier and the unit while in garrison that was not previously available.”

MC4 System Augmentation to AHLTA Proving Useful

CPT Christina Johnson, 3ID STB Aid Station physician assistant, used the MC4 system in 2008 while deployed to Camp Buehring, Kuwait, as a

professional officer filler information system member with the 3rd Armored Cavalry Regiment, Fort Hood, TX.

“MC4 was very effective when we conducted sick call in theater,” Johnson said. “We supported a post with approximately 20,000 service members, contractors, and foreign nationals who worked onsite. I saw approximately 30 patients a day and all of the information was collected in the outpatient program. If I had to hand-write the patient information onto paper forms, the process of seeing patients and charting the care would have been very slow.”

Now using the MC4 system in garrison, Johnson frequently treats Soldiers who report to the STB Aid Station for sick call. She then goes to the Lloyd C. Hawks Troop Medical Clinic (TMC) to administer acute care. The combined TMC is the only facility on Fort Stewart that provides a higher level of care, other than Winn Army Community Hospital. At Hawks TMC Johnson is able to view patient encounters in AHLTA after having initiated the records using MC4 at her aid station.

“When patients arrive at the TMC for additional care, I can go into AHLTA and pull up their medical records and see encounters generated from the STB Aid Station using MC4,” Johnson said. “This information allows me to quickly see the treatments that have been performed and what medications a Soldier has been prescribed.”

Lessons Learned, Forecasting Technical Hurdles in Theater

CPT Ricardo Swennes, 3ID STB Aid Station physician, deployed to Iraq in 2006. He worked in an aid station that did not use MC4. The problem was not a lack of equipment, but confusion regarding who to contact to install the systems.



LTC Edward Michaud (second from left), 3ID surgeon, meets with the technical support personnel for Forts Stewart and Benning, GA, as well as MC4 personnel, to discuss challenges and hurdles integrating MC4 systems into more garrison aid stations.



CPT Christina Johnson, 31D STB Aid Station physician assistant, uses the MC4 system to document Soldiers' medical information and review their medical history.

"When I talked with my medics about setting up MC4, they didn't know who to go to," Swenness said. "We didn't know that the CSSAMO staff had the knowledge to help us install the system. If we had used MC4, we would have had better access to information."

Swenness recalled that connectivity was always an issue at the deployed aid station. It is also an issue for garrison aid stations. Traditionally, the buildings that house the aid stations are not wired into the local computer network. This can be a setback when trying to install an EMR system. Connectivity is required to transmit patient data to the central data repository, where it comprises a Soldier's longitudinal health record and becomes immediately available to other medical personnel, regardless of location.

To mitigate technical issues that may derail EMR systems implementation in garrison clinics, Michaud involved the 31D's S6 and CSSAMO staffs from day one. "The technical staff has worked tirelessly to hammer out technical issues as well as uncover solutions to the networking challenge," Michaud said. "Meetings are held regularly to foster communication between the different organizations and to keep the process moving forward."

As a result of the collaboration, more garrison aid stations have connected to local networks via a secure wireless channel—Combat Service Support Automated Information Systems Interface (CAISI). As 31D expands MC4 to other locations, alternatives may be required.

"As we work to bring additional aid stations online with MC4, we have discovered that there is a severe lack of CAISIs and very small aperture terminals to establish network connections," Michaud said. "It is important to know this information early in the process so that we understand the hurdles that lie ahead. Many of the problems we experience in garrison are potential problems in theater. By implementing MC4 in our stateside facilities, we can mitigate similar issues when we go downrange."

LTC Larry France, physician assistant consultant, U.S. Army Medical Command, Office of the Surgeon General, recently visited the aid stations using MC4, crediting the close collaboration between the 31D and others to the success thus far. "I used the MC4 system in 2006 when I worked in the palace in Baghdad, Iraq," France said. "I know the positives and negatives with the system and the 31D is working through a lot of the negatives now."

By having every entity involved throughout the process, it will help make the implementation successful. It also helps prepare every level of the organization with their roles in using the system in future deployments."

More MC4 Stateside Integration to Follow

Michaud is encouraged about the progress that has been made with MC4 use in the aid stations and is looking forward to installing the EMR system into the remaining 31D clinics. "In light of the successful use of MC4 in the aid stations, I feel comfortable continuing the effort with the other facilities," Michaud said. "We have learned so much during this process that the other sites can benefit from the trials and errors experienced while integrating the systems in the first few locations. More importantly, the use of EMRs gives us a new capability that enhances the care we can provide to our Soldiers."

Michaud acknowledges that in addition to organizational collaboration, user support has been key. "If the providers were not happy with the system, then I would be very hesitant to move forward and continue the effort," he said. "Many are familiar with the system from previous deployments. They see the benefits and understand the importance of its use. We now have the advantage of taking better care of our Soldiers in the states and during future deployments. We also benefit from having the medical staff and technical support personnel practice using the system on a daily basis. This is a win-win for everybody."

For more information and articles about MC4, visit www.mc4.army.mil.

BILL SNETHEN provides MC4 program public relations support. He holds a B.S. in communications from William Paterson University.