



NCOs Help AMEDD Flight Paramedic Program Get Off The Ground

By Pablo Villa

Medical and technological advances have given modern-day Soldiers who have been injured on the battlefield access to an elite level of immediate trauma care from their fellow Army physicians and combat medics.

But the trek from the battlefield to the next round of care has been a perilous journey — the injured Soldier is typically extricated from harm's way and into an aircraft, but often without a doctor present and with fewer resources onboard. A 2012 study of 4,600 deaths in Iraq and Afghanistan showed that 87.3 percent of Soldiers died while en route to a military treatment facility.

A recently installed program at the U.S. Army Medical Department Center and School at Joint Base San Antonio-Fort Sam Houston, Texas, aims to bridge that gap. And the program's NCOs are expected to be a large

part of its success.

The program, which began in 2012, is designed to provide flight medics with additional paramedic and critical-care training, and civilian certifications. It meets this end by incorporating high-tech lessons from civilian medical professionals. Though the program is open to E-3s to E-8s, it is NCOs who provide stability and ease the transition from previous flight-medec teachings to the current best practices, said Master Sgt. Michael Cluette, the NCO in charge of the Flight Paramedic Program.

"The flight paramedics who we graduate now will be the future of where aviation medicine goes. So the transition point will be extremely important for those who are graduating here," Cluette said. "You have to be that mature noncommissioned officer to do that."

Owning responsibility for battlefield care

The impetus for the Flight Paramedic Program was an Army physician's nagging feeling.

Lt. Col. (Dr.) Robert Mabry authored a study of service members injured on the battlefield in Iraq and Afghanistan from 2001 to 2011. The study, published in the *Journal of Trauma and Acute Care Surgery* in 2012, found that of the 4,596 battlefield fatalities analyzed, 87.3 percent died of their injuries before reaching a military treatment facility, or MTF. Of those pre-MTF deaths, 24.3 percent were deemed potentially survivable.

Although battlefield medicine has vastly improved during every war since World War II, Mabry said that 24.3 percent statistic cited in his study — those whose lives might have been saved — kept nagging him.

"That's where we can make the biggest difference in improving patient outcomes," he said.

What Mabry found is that no one owns responsibility for battlefield care delivery, meaning that "no single senior military medical leader, directorate, division or command is uniquely focused on battlefield care," he said. "The diffusion of responsibility is a result of multiple agencies, leaders and units of the service medical departments each claiming bits and pieces with no single entity responsible for patient outcomes forward of the combat hospitals."

Commanders on the ground own the assets of battlefield care — medics, battalion physicians, physician assistants, flight medics and all the equipment. But they are "neither experts in, nor do they have the resources to train their medical providers for forward medical care," he said.

What Mabry concluded from his studies and field experience was that the solution to the gap in care cannot be addressed with a "single-bandage" approach.

A solution, he said, would require "evidence-based improvements in tactical combat casualty care guidelines, data-driven research, remediation of gaps in care and updated training and equipment."

And to supervise those medics, their training, and the medical evacuation equipment and procedures, there would need to be a specially trained and qualified physician in charge of that pre-hospital phase, he said.

Mabry illustrated the power of patient outcome data by tracking a National Guard medevac unit from California whose members were mostly critical-care trained paramedics in their day jobs — working for the California Highway Patrol and other EMS agencies. They deployed to Afghanistan in 2010, taking their civilian EMS model with them, he said.

"I compared their patient outcomes to the standard medevac outcomes and found a 66 percent reduction in mortality using the civilian medic system," he said.

As a result of that outcome, the Army has revamped its training of flight medics.

Providing a higher level of care

The Flight Paramedic Program began in earnest at Fort Sam Houston in 2012 under the 187th Medical Battalion and through a partnership with the University of Texas Health Science Center at San Antonio.

The flight medic course taken by 68Ws is six months long and is followed by the two-month critical-care course. The critical-care course includes six weeks of embeds with various hospitals throughout San Antonio as well as with San Antonio AirLIFE, which provides Soldiers with a close look at the high-tech application of medicine in the civilian world.

"Your EMT basic course in the civilian world is about 140 hours of training," said Maj. Matthew Nichols, director of the Flight Paramedic Program. "Paramedic training is 1,000 to 1,200 hours, and you already have to be an EMT basic. So that just goes to show you how advanced [the program's civilian-inspired] paramedic training is. It's above and beyond all the extra pharmacology, anatomy, physiology, hemodynamics, all that kind of more in-depth medical training they get in the paramedic course. Then they go on to an eight-week critical-care course, which is two weeks in the classroom of even higher-level, very intense, very fast-paced critical-care transport medicine akin to what ICU nurses do. They get to see how it is applied by professionals in that field. It's definitely a much higher level above the EMT basic level."

That closer look at the civilian side of trauma care is also something that was highlighted in Mabry's study, which stated that civilian trauma systems evolved after the Vietnam War as a result of Army medics and nurses who returned from the conflict and took on civilian jobs. Mabry said that as a result of this war experience, sick or injured civilians in the United States are transported to a trauma center by an aircraft, accompanied by a critical-care flight paramedic and a critical-care flight nurse, both of whom are highly trained and experienced.

"So the thought is, if a guy who is in a motorcycle accident two hours outside San Antonio is going to get a certain level of care in the back of an aircraft en route to a major hospital in San Antonio, then our Soldiers who have been wounded on the battlefield deserve the same, or as close to the same as we can provide within the Army," Nichols said.

To accomplish that, Nichols said, the Army is taking the expansive knowledge base available in its hospitals out to the point of injury. Handing flight paramedics the knowledge and training needed to make the proper interventions — and just as importantly, the knowledge to perhaps not intervene — is expected to help decrease mortality numbers.

"A lot of people think that an ambulance driver in the U.S., that's all they do — they pick up someone and they transport them to the hospital so the doctor can take care of them," Nichols said. "But, no, those EMTs and

those paramedics are conducting care. And the more care they are able to give with their knowledge and their skills, the more likely that that person transported is able to survive their injuries.

“Increasing the level of care provided in back of the aircraft with the critical-care flight paramedic alongside the ECCN (en-route critical care nurse) will help these long transports from point A to point B,” he said. “If anything goes south in that period of time, medically, then you have someone in the back who will be able to treat them better. The aircraft can only go so fast, so you can’t really ask them to go much faster to get them to the hospital. So the paramedic and the nurse in the back of the aircraft are trained to be able to handle those situations and basically mitigate life loss.”

The role of NCOs

The long-term goal of the Flight Paramedic Program is to transition all of the Army’s flight medics to become critical-care paramedics.

Through May 2014, 124 Soldiers have become nationally registered paramedics and 115 have graduated the Army’s critical-care course. Another iteration of the course began in July and is expected to conclude in March. Plans for expansion are being made in 2015. The quickening pace of training goes on despite the expected drawdown of troop levels in Iraq and Afghanistan in order to be prepared for disaster missions at home as well as for any future conflicts.

In the meantime, the transition to a new kind of flight medic training isn’t leaving legacy medics behind.

“I’m one of the legacy F3s (flight medics),” Cluette said. “It isn’t so much that we didn’t know how to use the combat gauze or how to stop a bleeder or put our hands in someone’s chest. What we don’t get as the legacy

individuals is a lot of the why-not-to-do-it or why-we-are-doing-it. We know the physiology from Baby Whiskey Land (medic school), we get the anatomy from Baby Whiskey Land, but what we don’t get is when to do it, when not to do it. We just go by the numbers, and the thought process for the legacy [medic] is, ‘When fear gets in your head, training takes over.’ You know just to follow the numbers, because I was trained to do it that way.

“The paramedic, we are now telling them, ‘Yeah, you were trained this way. But I need you to understand why you’re doing it, what you have to do if it doesn’t work and understand why it’s not working in order for you to fix it.’ An EMT might understand he may have to do it, but I may do it way too early or unnecessarily simply because I didn’t get enough of the understanding that what I was currently doing was enough.”

The bridging of the gap when flight medics of the old and new discipline come together will be eased by NCOs, Cluette says.

“NCOs will bolster that leadership to help coach and mentor the F3s when those Soldiers move out and junior Soldiers come in” Cluette said. “They will provide that leadership to help coach and mentor them on how to interact with each other. Because in an aviation company for flight medics it kind of varies, so if I’m a F2 (critical care flight paramedic) and I’m an E-3, and I have a F3 who is an E-5 or an E-6, and I’m having to train them, you have to be mature enough in order to understand that isn’t a leadership, this is a professional mentorship where I have somebody teaching me something that I need to know to help save lives on the battlefield. NCOs can do that.” ■

The Army News Service contributed to this story.



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