Col. James Jones, Director of Med CDID (Photo courtesy of MEDCoE)

The Medical Capability Development Integration Directorate Prepares for the Battle of the Future

The following interview took place at JBSA Fort Sam Houston on July 24, 2024

Dr. Gina Frank of the Borden Institute (Dr. Frank):
Okay, good morning. This is Dr. Gina Frank from the Borden Institute in support of the Harding project. I'm here with Colonel James Jones, Director of the Medical Capability Development Integration Directorate (CDID), sir, thank you for agreeing to talk with me. What is CDID and what is its primary mission.

Col. Jones:
Thanks for the question.

Med CDID determines medical gaps, we develop operational concepts, we lead experiments and exercises really with the desire to include all warfighting functions to determine requirements that need to be integrated into the future force.

CDID focuses on three imperatives that the Army Health System must accomplish to help the joint warfighter win wars.

The first imperative is evacuation and that includes ground air and sea evacuation in any theater wherever we're at in the world to support joint warfighter missions.

The second imperative that we must accomplish is maximizing return to duty. In that key area that's at echelon, meaning that if we can return somebody to duty at the point of injury, that's the optimal solution. However, we look at it rules of care and determine how we can best provide that service and that push of keeping combat power effectively aligned with the warfighter to be able to continue to contribute to the mission at hand.

The third is how do we overcome contested logistics? Humans are the most contested logistic resource in the Department of Defense. We start with a soldier that starts in the United States, deploys for warfighting mis-

sions, and if injured, may come through every role of care back to within for our military treatment facilities, and then return to active duty at some point in the future battlespace.

If we look at World War Two and previous wars, we returned entire divisions of people back to the fight and that's what we'll need to do. We are a little bit more aligned inside the CDID into bucket areas. The first bucket is our concepts of division that creates ideas to mitigate gaps.

"The first imperative is evacuation and that includes ground air and sea evacuation in any theater wherever we're at in the world to support joint warfighter missions." - Col. Jones MedCDID

The second division is our experimentation division, and it has three key priorities. It experiments with conceptual ideas and helps use them using Delphi techniques to help bring the community together to judge the ideas to mitigate gaps. We also do constructive experimentation where we bring technology like modern telephones and have soldiers build medical cards and other type of operational assessments of technology and evaluate how it works throughout the network. The third type of experimentation is wide prototyping where we take entire divisions, put them in the field as project convergence and look at technology at echelon to roll it all into the theory or model command.

Col. James Jones presents and award at MEDCoE

Then our third division is our requirements division where we write the requirements to fund all our future capabilities. We write course design updates to how we create new formations, and then we also help drive our science and technology with initial capability documents that ensure that we get products like freeze dried plasma and future platelets, autonomous triage, autonomous treatment, and autonomous evacuation. We do all that through our science and technology and partners at the Medical Research and Development Center at Fort Dietrich and the defense health agency.

Finally, we end with our integration division, which is our army capability manager, and they are responsible for the Army health system to ensure that doctrine, organization, training, material, leadership and education and personnel and facilities commonly referred to as the dot mil PFP domains. Which include policy through the Surgeon General are effectively aligned. That ultimately allows us to ensure that we're able to man, train and equip ready medical forces that are going to be fully integrated in the army combined warfighter units to ensure that we have supremacy of our soldiers in formations in which they fight.

Dr. Frank:
Okay, so the next question I have for you is how has the shifting focus from COIN to LSCO has changed CDID priorities.

Col. Jones:
Yeah, thanks for asking that question. So, COIN offered an opportunity where we were able to really mitigate the gap of evacuation by moving helicopters forward. And basically, as soon as a soldier was wounded, we were able to evacuate them off the battlefield and take them to a medical facility in Iraq or Afghanistan within that 30-minute window. We were able to control all aspects of the dot mil PFP air forward. We were able to get really a good return for soldiers that would most likely not have survived in a large-scale combat operation scenario without having surgeons readily available.

Large-scale combat operations require us to think differently. If you could put it in perspective, the future of warfare and large-scale combat operations makes you think of the division as a tactical formation. And a future division is going to add 27,000 plus joint and allied teammates under one division.

I like to give a dimensional discussion of the division so people can visualize what we're talking about. If your war was in the United States, and frontline was in El Paso, your headquarters would be in Tennessee. Now if you were to take that division and put it in USINDOPACOM, take and multiply that distance by three and now you have an idea of what you're looking to trying to command and control to consolidate fires of the future.

Dr. Frank:
So my next question for you is what then has been your top three priorities during your time here?

Col. Jones:
Yes, our top three priorities for the Med CDID has been focused on our three top extremely high risk gaps, hospitalization, both capability and capacity and then prolonged care which is second and that includes both material solutions from blood oxygen to treatment modalities and formational changes such as the pro-longed care augmentation detachment that we're rolling out this year.

And then on the far right, we've also looked at the non-material solutions. How do we take the center of gravity that combat medic and train them to a level that allows them to do those prolonged care tasks at echelon?

And then the third priority has been the CBRNE countermeasures, chemical biological, radiological and nuclear. Really, we've been focused on how we employ those countermeasures at echelon and provide collective protection for our role one and role two capabilities of the future because the future battlespace unfortu-nately gives three types of patients.

Two of those types we have not seen in our history in the last 50 years or so. That’s the first bucket, the CBRNE patient category and about a third casualties of the future will fall into that realm.

The second bucket of patients that we are going to see is disease non battle entries that are novel, such as COVID and other viruses and bacteria that we've not had to deal with that now need to be treated far over that we would typically be able to evacuate further back with more specialized clinicians to provide that care. Now those medics, doctors and nurses that are far forward are going to have to provide that care at that at that echelon without the luxury of evacuating.

Realizing our trauma patients are changing, because they're going to be more, there's going to be a lot more burns, chemicals, exposures that we did not have to deal with in Iraq and Afghanistan, or even World War

Two, when we add the large number of patients. Our focus has been on how we develop capabilities that allow us and able us to take care of 1000 casualties a day at echelon yet need our three imperatives. Evacuation maximize return to duty and overcoming contested logistics.

Dr. Frank:
Well, I guess my next question then goes along with the last one about priority. I understand there some challenges with that. So, what do you see as the biggest challenge facing the Medical CDID… especially in the future?

Col. Jones:
That's a great question. The number one challenge for the Medical CDID and the Army Health System is funding. The risk to being able to employ these types of capabilities at that echelon is the ability to fund them.
Medical care is expensive in the civilian sector and Operational Medicine is even more expensive. So, when we look at the total DoD budget and what we contribute to Operational Medicine, we see that the risk of being able to develop these capabilities such as freeze-dried plasma, new oxygen generation capabilities at echelon, those type of capabilities do not exist in the civilian sector and have to be developed for military operations. Unfortunately, that makes it more expensive for industry and requires academia, research, and industry to collate and to develop these capabilities. That does cost quite a bit of money, we have to ensure that we can identify the risk for the Army Health Systems senior leaders that can then communicate with the Department of Defense senior leaders and Congress on why our capabilities must be funded.

AI Generated Picture"Medic of the Future"

Dr. Frank:
As far as the Harding Project is concerned, it aims to spur professional discourse across all the centers of excellence. So how do you see Med CDID adding to the professional discourse across the army and of course across the centers of excellence?

Col. Jones:
Excellent question. I think we do that through our campaign of learning and experimentation. We have been on a path since 2021 to really deliver experimentation at scale, not just an academic setting, but in the dirt, where we bought operational units through the joint warfighter assessment through multiple platforms. We evaluated how we integrate with the joint warfighter and our army warfighting partners, predominantly with maneuvers sustainment protection.

We look at those warfighting functions to include aviation to understand that when we move on the battlespace, how do we deliver this capability without becoming without becoming a burden to the warfighter? That the balance with medicine is that we build armies to annihilate and take out the enemy. We don't build armies for evacuation. We don't build armies to support the medical team. We support them so that this

force comes in in the protection mechanisms that we've had to do and integrate that discussion with our warfighters to understand our relevance, and how we have to be positioned at echelon and incorporated with the joint warfighters to avoid becoming a burden and preventing them from doing their continuous mission, providing fire support and the ability to maneuver at the freedom that a maneuver commander needs in order to overcome the enemy of the future.

Dr. Frank:
Finally, my last question for you, sir. Is there anything you would like the greater audience to know about your organization or your current priorities within the Med CDID?

Col. Jones:
Yeah, I would like for the audience to understand that the med CDID is focused on delivering the army of 2030 at the division as a tactical formation. We are focused on experiments and exercises to ensure that dot mil PFP integration is there. That we can enable the Joint Forcible Entry Units of the future and standard divisions and poor formations and the theater level to operate across all domains, and that we want to be good partners and leader development with our other centers of excellence so we can maximize human potential. That we're leveraging project convergence at scale, so that the senior leaders understand our value of non-material dot mil PFP applications such as our combat medic training, and that we're employing the future studies program or to the build and design the army of 2040 or 41, or 42, etc. So, we continue to look forward because as Abraham Lincoln pointed out, “The key of predicting the future is by ensuring that you deliver it today.”

You basically deliver the capabilities that are going to design the future, which then predicts the outcomes of the future. We want to ensure that we're protected that we have the information advantage, and that our force development and force designs are seamlessly integrated with our joint warfighters to ensure that the concept of deployment allows us to work in any environment. Our med CDID is focused across all those domains, integrating as an enterprise with the Army Health System, with the oversight of the integrator of the Surgeon General and the proponent of the Medical Center of Excellence commanding general, we're really getting after the priorities of the Army Health System at scale.

Dr. Frank:
That sounds exciting for both current and future for the medical career fields across the army but also with the senator of X volunteer and med she did. Thank you so much for your time this morning. This has been a really enlightening experience for me and great for professional discourse across the army. So, thank you for your time, sir. This has been Dr. Gina Frank with the Borden Institute in support of the Harding Project.