



## Closing Supply Chain Gaps: How Optimized Digital Delivery Can Improve Health Outcomes in a Post-Pandemic World

Dr. Geeta Nayya...: Thank you Casey. And thank you for our audience for being with us today. As Casey mentioned, I'm Dr. Geeta Nayyar. I'm the General Manager and Executive Medical Director of HLS Provider here at Salesforce. And I'm so pleased to be here and looking forward to today's conversation around closing supply chain gap and how optimized digital delivery can improve health outcomes in a post pandemic world.

I have the pleasure of being joined by a pair of supply chain experts at the Defense Health Agency. Colonel Randall Ivall, their Deputy Assistant Director for Medical Logistics and Pat Staley, their Program Manager for Medical Logistics Information Technology. During this session, we'll address DHA's mission, the problem their workforce tries to solve and how the COVID-19 pandemic has impacted logistics systems and capabilities. We'll also get a firsthand view of the system they're putting in place now to improve the access to critical prescription drugs and services for soldiers, veterans, and their families, in the years ahead.

As a reminder, this is an interactive session. We want this to feel like a conversation and ask you, the audience, to jump in the chat. Let us know what you think about our conversation and ask any questions you might have. Our chat moderators will keep the conversation going with you. Okay, gentlemen, let's get right to it. Can each of you please tell us a little bit about yourselves and your role at the Defense Health Agency.

Col. Randall Iv...: Colonel Randy Ivall. My position I hold is as the Deputy Assistant Director for Medical Logistics. Like you said, that just rolls off the tongue. So basically in that role, we provide the strategic oversight to the defense medical logistics supply chain. So we've got about an \$11 billion supply chain that we manage and across the five functions that we have within med log and that really covers down from our supply chain management division, which is, you typically would think of. But what's very unique about us is we have a strong clinical integration actually in MEDLOG. So we have our quality and optimization branch that is made up of clinicians, pharmacists, nurse practitioners that really work in a lot of the standardization aspects of our supply chain. And then we also have environmental services,

which works on the actual as the title states, services, that's housekeeping, regulated medical waste, medical gas management, things like that.

The third division is Healthcare Technology Management, and that is medical maintenance, that is medical equipment procurement and lifecycle management, all that. The fourth division that we have is really our business operations, which focuses on the portfolio, which is a very kind of underpinning division that we have to support all the other divisions. And then the one division that we have which is kind of probably unique to us, is our log plans and readiness division, which is really focused on a supporting role to the combatant commands or the services and their combat development. So, that's MEDLOG overall.

I also have wear a secondary hat here is I chair the Defense Medical Logistics Proponent Committee, which is all the senior logisticians across the DOD ranging from defense logistics agency to the joint staff, to the services and their senior O6's. And that's a governance form where we come together and look at the strategic view of the medical logistics enterprise, and where we can provide those integrated strategic effects for improvement. So in a nutshell, that's what I do on my daily basis.

Dr. Geeta Nayya...: Colonel, thank you. All right, now I know the lingo, its MEDLOG. So if someone had told me that, that would have been a lot shorter, so thank you for that. And Mr. Staley, do you have anything you'd like to add?

Pat Staley: Yes ma'am, thank you. As stated, my name is Pat Staley. I am the Medical Logistics Information Technology Program Manager. To shorten that down, that'd be the MEDLOG ITPM. I'm assigned to the Defense Health Agency and I report to the solution delivery division and the DHAJ6. My organization is responsible for the development and sustainment of the DOD suite of MEDLOG IT applications. And that includes the Defense Medical Logistics Standard Support Application known as DEMALs. And so that's what we will refer to that in our discussion today, as well as the theatre enterprise wide logistics system tools and probably more importantly, our technical refresh.

So we are technically refreshing legacy applications into an application that we'll call Logical. The mission of the MEDLOG ITP EMO, is really to enhance the delivery of healthcare by providing

innovative and integrated IT solutions to the business and to the Defense Medical Logistics Enterprise that Colonel Ivall spoke of. We do that for the DOD, as well as for other federal entities and agencies. We provide the IT enabler for all of the medical logistics functions that Colonel Ivall spoke of, supply chain management, equipment maintenance and management, facilities management, as well as reporting and analytics in support of the DOD hospitals and medical units far forward.

Dr. Geeta Nayya...: Thank you both. Thank you both. So life has certainly changed, would've loved to do this with both of you in person. We are all trying very much to get through and out to the other side of this pandemic. Tell us a little bit about some of the investments in digital transformation that you made both before and now in the thick of the pandemic.

Col. Randall Iv...: Yeah. So for me specifically, for MEDLOG, we were in the middle of the National Defense Authorization Act transition of integrating all the institutional healthcare underneath the authority direction through control of DHA. So we were kind of about halfway through that transition. And so we were nowhere close to the future state that we were wanting to establish for DHA MEDLOG. So one of the things that we're doing in our future state is we're really trying to get after like data and analytics is one of our key functions that we're going. So in a way, the pandemic was actually had the one silver lining, is it really forced the acceleration of building that program. So we were able, we were fortunate to get some contracts support onboard and to establish what we call our MARC, our MEDLOG Analytical Reporting Center.

And that was a direct effort, which had huge impacts to the enterprise, by teaming with Pat and his team and the LOG IT PMO, in creating all the data links, then to not only just have just data, but now we're creating business intelligence. And I say that that was critical because in a very constrained supply chain, we were able to establish a prioritization and allocation board. And so being able to build the algorithms of how we wanted to prioritize and then how we wanted to allocate that really constrained material, the center of gravity for that, or the key enabler of that was that MARC team, that analytical reporting, which then has the direct tie back into the IT world and to be able to gather that data and integrate it where we can.

Dr. Geeta Nayya...: We've seen that in the private sector as well, Colonel, right? The acceleration of so much technology investments in the digital space. So its certainly just one silver lining, I appreciate that perspective. Pat, any comments from you?

Pat Staley: I think it's important to highlight that our MEDLOG IT enablers are available or have been available throughout the DHA and the service clinical areas. But if this pandemic has taught us anything, it's that the greater reliance on that, working the data and integrating the data for better reporting, as Colonel Ivall kind of described, is a key focus for us moving forward.

Dr. Geeta Nayya...: Okay. So, as you're going forward on your digital transformation journey, tell us what you're solving for, as it comes to digitizing the distribution of resources, medical supplies, ensuring hospital emergency rooms, healthcare providers, all have the critical supplies and drugs that they need? We've clearly seen how important that is at different moments throughout the country, through the pandemic. So help us understand what the solve is there.

Col. Randall Iv...: I think if I understand what you're asking, it's like for us, it comes to visibility of the material, visibility of that data and trying to get visibility of that data as far forward into the supply chain as we possibly can. Because obviously, the closer you get to the patient care, the more dynamic that stock becomes. So it becomes pretty difficult to have a real accurate real-time inventories on ads. So that's one aspect of really kind of where we're trying to go towards to achieve some of that oversight of the supply chain. And in doing so, now we can create efficiencies. And when we do that, now, we've got visibility into that business intelligence. Now, one of the other future state things we're working on is, and then enterprise is enterprise data management.

So now we know what people are buying. Now we can look at, where can we create synergies looking at standardization actions, for example, or catalog management. So to eliminate some of the variation that we have in catalogs across all the, you know, across the military health system and each of the MTFs. Same exact product, but somebody could call it a little bit different on their catalog. And that causes, on the back end, when you're trying to rationalize all that data, that causes confusion and time, and the pandemic time was something that we didn't really have a lot of. So again, so those are some of the things that we're utilizing that IT aspect to get out for the future.

Pat Staley: And one of the things that I think you hear and resonates through Colonel Ivall's remarks is the ongoing need to continue to improve and get after analytics and reporting. And that is all enabled by the delivery of accurate and timely data. So I think that's something that we are all focused on, on improving, whether it's in this crisis that required the curation of data, MEDLOG IT data along with clinical data for the decision makers. I think that's exceptionally important moving forward.

Dr. Geeta Nayya...: Yeah, this is so insightful. I can tell you on the clinical side, there's nothing worse than being in an ICU or an ER, and going to the supply closet and not finding what you need, right? And having to get creative for both the physician's staff and the nursing staff. So what you do is so critical, that behind the scenes directly impacts, the front lines. And so very much appreciate both of your comments. Talk to us about the other agencies that you coordinate with, the Veterans Administration, just all the coordination efforts and agencies that you have to work with and any comments there.

Col. Randall Iv...: Well, I think we've got a really good working relationship with the VA. We're doing a lot of things with them, and we're going to continue to do more and more and more with them in the future, as the VA takes advantage of utilizing some of the prime vendor contracts that we have through the Defense Logistics Agency. And I think one of the key aspects of our engagement with the VA is actually filming the demos and then the refreshed IT capability going into the future or logical, that Pat can probably speak a lot more to, but I think that's a huge example of the relationships that we have with the VA.

Pat Staley: Yeah, Randy, thanks for that. I mean, in terms of our engagement with the VA, we are partnered with the VA Logistics Organizational Redesign. We're partnered with the VA Logistics Redesign Program office to deliver, integrate, implement, and deploy demos across the VA as part of their overall strategy for logistics and supply chain transformation. So that's an ongoing partnership that continues.

Col. Randall Iv...: Yeah. And I think it's kind of critical to point out for that too, that the DOD, we only make up about 5% of the industrial base of the medical supply chain. And so now if we integrate more with VA or some other federal partners, then that gives us that much more buying power going forward.

Dr. Geeta Nayya...: That's right. So, Colonel, I don't think I told you, my uncle is a Colonel in the Indian Army. And so whenever we talk about, domestically here, lessons learned, he would always say, "Kid, the lesson is to learn, right? That's the whole lesson, that's the whole journey." So if you'll share that with us, what are some of the things that you all have learned, that are informing the future. And as we continue to try to push the limits and continue to innovate in your space, what is the lessons learned in MEDLOG, that you both would like to share with our audience?

Col. Randall Iv...: So, for me, I think one of the key lessons learned is almost like don't forget that human interaction, that human relationship, it's the relationship that Pat and I have, between the functional community and the logistics IT community, or if it's that relationship, that personal relationship that I have with some of our service counterparts or some of the other agency counterparts, it's that human interaction and actually communicating what the requirement is to them and working through that together.

I think that people can kind of forget about that in this modern age. I think so that's kind of a key lesson learned, and that was actually one of the key enablers that allowed us to really have some success through this pandemic response. Because again, as I mentioned, we were halfway through a transition, so everything was very, very fluid. And if it hadn't been for those personal relationships, and then as time went on and then integrating a lot of that logistics and IT, so that we can see what that data's showing us as far forward in the supply chain as we can. But I think it just comes back to those working relationships.

Pat Staley: Yeah. I think the most powerful story coming out of all of this is the relationship and the partnership between the MEDLOG functional community and the IT, to develop and sustain capabilities and solutions as we went, whether it was continuing to enhance the delivery of data for reporting and the value that, that brought not just for Colonel Ivall and his team, but for senior leaders at the highest level in the DOD and in the DHA.

But to be an innovative and leveraging existing solutions that we currently had maybe slightly tweaking them, but to give us the ability to support, maybe customers that weren't fully utilizing our platforms. So for example, really looking at the vaccine as that became a very high interest issue from a inventory management and reporting perspective. We were able to leverage capabilities inside of

logical that historically hadn't been used to do that inventory management and tracking for non demo sites. And so that's been a huge value for us to be agile and responsive to the needs of Colonel Ivall, the enterprise and other customers.

Col. Randall Iv...: I would foot stomp that and say that's a huge aspect of that. And going forward, I think one of the huge lessons learned is we see the value of what logical will be in the future, or what Demos is now as being an integrator for all that medical supply chain information and things that get worked through there. Because in our current environment that we have right now, if there's platforms that don't necessarily use Demo say in the operational setting on board a ship or with an army brigade that's flooded. So they're using their own service IT systems and platforms, but when we can create those interfaces into Demos now or Logical in the future, then it becomes very, very powerful, now we can see the entire enterprise of supply chain data and it's integrated.

Dr. Geeta Nayya...: Great. Thank you. So given those lessons learned, what's next? We're in May of 2021, what's next, what's the future hold?

Col. Randall Iv...: Well for me, it's to continue with the transition and moving the authority direction control of the treatment facilities underneath DHA. And so as we stand down those functions in the services, I'm extending those functions up in the DHA MEDLOG. So in essence, I'm trying to turn the lights off in one office, at the same exact time, turn the lights on in my office. So that's a very tricky balancing act, but we're working through that.

For me, going forward, I have a few, what I call a military term, a center of gravity, that are some critical enablers for me to be able to do my job. The current construct that we're developing is a very centralized function. So one of the key centers of gravity we're developing as our customer support teams and those are that direct link between the headquarters function up here, where we have all the subject matter expertise ranging from clinical engineering, to data IT, or to just supply chain or contract management for some of those environmental services' things. Those customer support teams are the direct link between the MTF or the medical treatment facility and the headquarters, as well as being a direct link into the market offices themselves, because we're trying to create a very lean structure here, so that's going to enable us to do that.

So that's one kind of key thing that we're trying to build out for the future, as well as just your build out the remainder of the headquarters staff. Another key aspect of that is MEDLOG is we're creating kind of again, very centralized functions. And basically we're kind of like a material support center where a requirement comes in, it doesn't matter the commodity, the solution on outbound is a sourcing solution, whatever the case may be. And so MEDLOG is performing a very critical integrating role in that aspect as well.

In our log plans and readiness division, which is not your traditional supply chain division, they have that role of supporting the service combat developers for contingency material, as well as the combat and commands for operations going on around the globe. And so, that's a huge build out that we need to do, that really didn't exist prior. And as actually the pandemic was an example of showing that that was a very huge success for us, it was more successful than I could have imagined between that and our analytic and reporting, are our two success stories on that aspect. So that's what I've got going forward, which is not nothing small at all.

Pat Staley:

For us, the future is tied to several lines of effort that we had in place, well before the pandemic kicked off. First sustainment of our legacy applications, our current capability that we're delivering to the enterprise for the DOD and the VA. Secondly, we continue with our transition from demos to our technical refresh of Logical. Logical would give our 25,000 or so users access to the full suite of MEDLOG capability that I described to you earlier via the web from anywhere in the world, using a single login, a single sign-in page.

And the neat thing about those capabilities is that they will be delivered in a fashion, the user interface, that's very intuitive. It'd be very Amazon-like in its look and feel, and powered by highly intuitive and integrative processes and technology. We expect to achieve that operating capability in 2023. We're looking and working with the services to integrate with their logistics system. So Colonel Ivall mentioned that earlier that the use of the service log systems, we're looking to continue to integrate with them moving forward. And really that goes back to the ability to enable a comprehensive view of data across the enterprise.

Dr. Geeta Nayya...:

So the last question, we've covered a lot here and really appreciate both of your insights, it's very inspiring. Tell us what is the impact of some of the changes, some of the future statements you made Colonel, and Mr. Staley in terms of how this really affects the average

service member, the average veteran, the average family. What does this look and feel like, and how does it relate back to DHA's mission and values?

Col. Randall Iv...: So in terms of the benefits to the enterprise or the benefits to those folks at the treatment facilities itself, we've talked at length about the benefits of the IT, what we can do with that, whether it's reporting up to a higher headquarters, providing we can provide dashboards that will then help focus people where they need to provide that, where they need to put work on that given day. And I think the other aspect that I would highlight is really kind of a financial aspect, because a lot of what we're doing is regarding standardization, or other programs such as that, is having huge impacts even all the way down to the MTF level. So for example, within our, we call it MMESO, or Medical Material Enterprise Standardization Office.

We go out, doing clinical evaluations of material that we can then bring on and get discounted pricing for. So with that, and for fiscal year '20, we actually achieved \$120 million in cost avoidance, that then could be reutilized within the enterprise, whether at the MTF level for other clinical purposes, whatever that case may be. And then over the fiscal years, FY '20 to '24, we're projecting about a \$440 million cost savings overall. So there's an example of where really the ultimate impact can be felt down at the very tactical level for those folks that are forward in the treatment facilities.

And that's just one line of effort relative to the standardization. We also are doing kind of a similar cost saving initiatives for healthcare technology management, whether it's trying to create centralized medical maintenance contracts, that we can get discounted pricing or a centralized equipment procurement, where we can then try to aggregate the requirements and get to a baselining of equipment across the enterprise and to eliminate variation, which then has a training potential piece there to save, as well as the patient safety aspect of that.

And then the third line of effort that we have going on along that thought process is within our environmental services. And that's getting centralized contracts for housekeeping, regulated medical waste and med gases and things of that nature and where we can try to capture savings or cost avoidance for the enterprise.

Pat Staley: I think from our standpoint in the IT Program Office, our focus and our value is to be able to be the reliable partner and the key enabler

to Colonel Ivall, to do those things that he just described, to meet those priorities of the business in support of the mission of the DHA, to deliver care across an integrated system of health, and be a solid partner.

Dr. Geeta Nayya...: And with that, we are out of time for today's conversation. Colonel Ivall, Mr. Staley, thank you both for being here. It has been a pleasure and an honor to speak with both of you. Thank you for all the work you're doing for the Department of Defense. On behalf of our event partners and sponsors, we appreciate your time and participation. Casey, we are over and out.