**Audio Transcription** 

Season /Episode #:	Season 1 Episode 6
Guest:	Dr. Ward Newcomb and Devin Harrison PMP, MBA
Title:	Clinical Simulation in VHA Space Design

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Doctor Maia Carter	Hello, my name is Doctor Maia Carter and welcome to Let's Talk Virtual Care podcast episode six Clinical Simulation and Veteran Health Administration space Design with Doctor Ward Newcomb and Devin Harrison. Each episode unpacks key approaches for operationalizing virtual care from exceptional VA staff and health care innovators. You will gain valuable, timely insights for the mobilization of virtual tools for veteran health and well-being.
Doctor Maia Carter	This blog was produced by the Office of Primary Care Virtual Care Integration Team. Devin Harrison is a program lead for the assessment Collaboration and outreach portfolio at the National SIM Vet Center. Devin provides operational oversight for simulation-based health care design testing activities. He and his team use process oriented, simulation-based strategies to identify latent safety threats during pre-construction of clinical and administrative spaces within VHA.
Doctor Maia Carter	Devin has participated with mobile application development, software application integration, construction renovation and construction design and one fun fact about Devin is that in Atlanta, he created an investment group that renovates single family homes and recently partnered with Grady Behavioral Health Outpatient Center to provide housing for tenants with behavioral illnesses. Now, wow, that is impressive. Doctor Ward Newcomb is a board-certified internist with over 30 years of clinical practice and leadership.
Doctor Maia Carter	As both the Office of Primary Care and Sim Learn's subject matter expert on the linkage between clinical space design and clinical operations, he brings vast experience and design and planning to aid both the front-line leadership and planning new clinics and the VHA Office of Construction Facilities Management and developing design guidance that supports teamwork and the veteran care experience.
Doctor Maia Carter	And one fun fact about Doctor Newcomb is that he studies ceramics and glass art in college. Now, I think that's pretty cool. Welcome to the both of you. Thank you for joining us for today's vlog.
Devin Harrison	Thank you, Doctor Carter. By the way, I have one of those mugs that.
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Doctor Ward Newcomb	
Devin Harrison	that Dr Newcomb created as well from one of my sons.
Doctor Maia Carter	Love it. So as healthcare continues to grow in technology, we must leverage it to create environments of healing that are both functionally optimal and also support virtual care. So, let's jump in. Devin, I would like to start out by discussing the National Simulation Center. Tell us the purpose of this center.
Devin Harrison	Yeah, absolutely. And thank you, Doctor Carter, again for the opportunity to talk with you in the group. So, the purpose of the center is designed to provide health care personnel the opportunity to simulate scenarios that they would have to do within their workspace. I think the biggest thing that is important for people in the clinical field to be able to do is to continue to repetitively learn how to work in high pressure situations, and the center allows you to do that process simulation so you can be prepared for when you're out in the field doing the work that you're assigned to do.
Devin Harrison	And the center is open for everyone within the VA enterprise, and usually you have clinical staff come to Orlando to do those different classes, whether it be within cardiac arrest, resuscitation and then simulation essentials.
Doctor Maia Carter	Great. So, sounds like preparation is key. And being able to simulate scenarios is important so that when the scenario actually happens, we're prepared and ready to go. Absolutely fantastic. Doctor Newcomb, how do we use mock up space to explore the interaction between space design and operations?
Doctor Ward Newcomb	So great question and thank you for allowing me to join you today in this, video log. When you work with frontline leadership and staff, many of them do not have formal training in how to interpret two-dimensional floor plans. Since floor plans are two dimensional representations of three-dimensional space, and they really are very cryptic in many cases, if we're able to build a physical mockup or create a 3D virtual mockup using computer technologies, it allows leadership and staff to experience the, space more directly.
Doctor Ward Newcomb	Devin and his team have been working with CFM, and I've been there in an advisory capacity on, looking at specific spaces for, outpatient clinics, for GI lab we're working on now and inpatient care and others to allow frontline

	and, staff to experience the physical space before you build. You know, before you build 100 patient care rooms, you ought to test it first.
Doctor Ward Newcomb	And, the Sim Vet people are very good at, helping people do a workflow, a scenario through the space, looking at practical aspects of is there enough room or things in the right place? Is it safe? Is it private? how does it hold up to the stress of emergency? How do you, you know, are the systems in place, to call out for help and this type of thing, which were very, useful and practical to, the end users, which is really the whole point of everything about VA design,
Doctor Ward Newcomb	construction facilitates acquisition is to create, environments that support, and enhance the veteran experience of care and the our staffs experience and work life in the V.A and as an example, if you build up a room and test it first, you don't wind up putting the computer workstation in the wrong place in the room and things like this, or at the wrong height or whatever.
Doctor Ward Newcomb	Test it first before you build 50 of them.
Devin Harrison	Yep.
Doctor Maia Carter	Absolutely. So, Devin, tell us a little bit about the stakeholders who was involved in these simulations. And also, what are some of the successes that the simulation center has achieved?
Devin Harrison	Sure. Thank you. So, it's critical to incorporate all stakeholders within this process. A lot of times when we do design reviews, especially in my experience as an engineer, before I became in this position, we would just include primary care physicians and potentially primary care nurses, just for an example of a space that may be renovated within primary care, the stakeholders incorporate, and encompasses all staff, frontline staff as well.
Devin Harrison	So, we bring in staff from that are MSAs, dietitians, physicians, nurses. We even are very intentional about incorporating groups on the Veteran Experience office into our simulations as well. So, to make sure that we have a voice for the veteran, and everybody should be able to have a voice in that and take a look at what is going to be the best space to provide care for the veteran.

Devin Harrison	Some of the successes that we've had thus far include working with the emergency department and through doing scenarios and simulations with the emergency department, we were able to incorporate changes to design spaces that that are included in the current VA design guide that is housed within the Office of Construction of Facilities Management, Technical Information Library. We've had people tell us that what we're able to do in the matter of hours is significant, because before decisions and things that needed to be done on how something should be designed took months.
Devin Harrison	So, the minimizing the timeline that it takes to make decisions that are going to be critical to the health care of the Veteran.
Doctor Maia Carter	Fantastic. I love, love, love the team approach everyone involved in the simulation and clinical staff, administrative staff, leadership, and then the efficiency that you speak about. Awesome. So, Doctor Newcomb, share with us a little bit what role clinical design plays in virtual care.
Doctor Ward Newcomb	Yes, I think it's an important question. When the most recent outpatient clinic design guides were written, virtual care was just barely getting started and really was mostly telehealth. I mean, using the telephone, it was video based. And, so the mini clinics are not specifically designed to support both team work and virtual care modalities and face to face care in a seamless manner.
Doctor Ward Newcomb	And the there's no standard clinic across the VA. There's design guidance, and it changes over the years, and people have to work with a variety of spaces. But as we move forward, we like to work with frontline staff and leadership to, develop better spaces that allow for seamless teamwork. moving from the workstation into a huddle to doing VVC, going to the patient care room, going to do group care, all of it in a very convenient and seamless manner.
Doctor Ward Newcomb	And we sort of have a vision we'd like to work on, which is as an example for the PACT Teamlet in its traditional configuration of the four staff members would have a, you know, a quad seating area that's an open work area, but you can turn inward to the group, face each other and be able to have huddles on the fly and this sort of thing, but then be able to turn around, go to your desk, have some sort of a virtual or physical screening mechanism that, gives you both acoustic and visual privacy, without having to go somewhere else to do video care.
Doctor Ward Newcomb	And I think this is something that doesn't exist yet, but I think it's something that the VA could take a leadership role in creating.

Doctor Maia Carter	Fantastic. I love the idea of a configuration where you're sitting in one direction, huddling with your team, and you swing another way and you're in a private space for virtual care and being able to design space that honors the operation and helps promote adoption as well. Thank you for sharing that.
Doctor Ward Newcomb	So we'll be looking for volunteers from the field to help us figure out how to do it.
Doctor Maia Carter	Absolutely. And I know our team, our virtual care integration team, will be happy to partner with you and your team and moving forward in that direction. So, Devon, I understand there is something called digital twinning where we can go on that physical space of simulation and create a digital environment. Can you please tell us how does that work?
Devin Harrison	Yeah. So let me just talk about the origin of digital twinning and how we leverage this technology with the design and testing that myself and Doctor Newcomb does. We're constrained to the space that we have. You can only build so many fake exam rooms within the space. we were also subjected to the risk and barrier of travel.
Devin Harrison	You know, people may not be able to travel to Orlando to do design testing. So, we needed to expand our scope and leverage technology. And that's where the digital twin application came into play in. The Digital Twin application allows you to create and generate a design based on attributes that you want to see within your design plan layout.
Devin Harrison	So, for example, if you were thinking about doing a new primary care space and you wanted ten exam rooms, all that, maybe 140,000 square feet an exam room, you want your hallway smaller or larger? You want your waiting room smaller. All of those different attributes you put into this generative design feature within the app. And then the application creates the flow plan based on the design that you're looking for.
Devin Harrison	And then once you have the design laid out, the next feature would include a design simulator. This is where we use AI technology to incorporate how simulations are going to occur based on what you designed. So, if you look looking for mass casualty events and how that's going to be affected based on the space you created, or you want to see how your traffic patterns are affected based on the space you created, this design simulator will give you the ability to do that.

Devin Harrison	What the design simulator also allows you to do is move furniture from different locations within an exam space. So, let's say you want to get a little granular and you want to see how your workflow is affected within your exam room based on how your equipment and furniture is laid out, you may see that there are some safety threats based on how your furniture is currently laid out and positioned.
Devin Harrison	You have the ability to move those pieces around to fit the best optimal workspace environment and remove those safety threats that may have been there before you started with you on that design. Other feature that comes with this design application is a measurement tool. So, we have instances where we've been in a field, and we've seen that wheelchairs are larger than the doorways that they're supposed to go into.
Devin Harrison	For exam spaces. And when you find that at the end of a project, significant funds need to be used to change that in order to open the doors for operation and for health care. And lastly, the application allows you the ability to immerse yourself into the space via virtual reality. People have the ability now with VR headsets to know what this space is going to be designed and look like before the design is 100% completed.
Devin Harrison	Before that first shovel, the dirt before the boots on the ground doing construction, and it just gives you the ability to have a feel and be level set on what to expect.
Doctor Maia Carter	Fantastic. I love the idea of having this digital tool where you're not restricted by travel or having to be at a certain location, and you can look at things and get it right the first time, and then the VR headset on top of that to really feel the environment. And, the efficiency of it all is, well. Thank you so much for sharing that with us.
Doctor Maia Carter	Phenomenal tool.
Devin Harrison	Noproblem.
Doctor Maia Carter	And Doctor Newcomb, what is the role of leadership and pre activation socialization for staff prior to moving into these buildings.
Doctor Ward Newcomb	Yes, I mean leadership should, you know, view the opportunity of any new space as an opportunity to leverage their operations, forward to be more effective, more veteran focused more team based and should look at the new, project as a platform or stage for transformation. You move to an

	environment that supports room in the veteran, teamwork with colleagues sitting together to enhance communication, warm handoffs, huddling, care, coordination, all advanced in these more open teamwork environments.
Doctor Ward Newcomb	But if people aren't used to it, it can be a, very radical transition for them. If they're not, if they're not experienced in it. And leadership needs to take a very proactive role, you know, starting as early as possible in the, facility acquisition process. And pre-designed or design and, you know, at least a year before you move into a new space, start having people practice one of the key things or concerns that comes up about team workspace in the VA, where you have people who haven't worked in a team workspace before, is they find it noisy or distracting.
Doctor Ward Newcomb	You know, there's a lot of physical and technical things we can do to reduce noise surfaces, technologies, noise canceling devices, you know, and noise familiarization processes and systems. But really the control of that environment is really based on the socialization and the team members to work together. All those other things help. But if you, you know, people don't learn to sort of use their indoor voices, you cannot overcome that.
Doctor Ward Newcomb	It's, you know, people have to talk like they're in a library, sort of use their headsets. These kind of things all help. So helping people get ready for that can make that a much easier, happier and more productive transition, you know, the old saying that, you know, everybody likes change. They just don't like to be changed.
Doctor Ward Newcomb	They don't like forced on them. So, you know, engage early and seek solutions from your frontline team members who will be using the space. I'm speaking for Devon and myself. We would love to engage with people in innovation, you know, and not just safety is which is very, very important, but the innovation of how do we get to the next level of design and the VA, how do we serve our veterans better, how do we serve our staff better?
Doctor Ward Newcomb	How do you know people come work in a clinic for 20 years, so it should be a nice place to work. You know, on the topic of virtual care is how we integrate the virtual life and the physical life and VA service to veterans is that if some of you know you have a virtual team, your clinical pharmacy specialist is in Montana and your, neuro consultant is in Chicago, and your primary care teams in Georgia, you know, how do you create a team out of that?
Doctor Ward Newcomb	And how does technology in space support that teamwork and, you know, how does the people in the physical space interact with people in the virtual space to create teamwork? And I think modeling and simulation, informed

	by all the experience of staff across the country, we can we can help people feel more like part of a team, act like more part of a team, and, take more pride and, and satisfaction in their work.
Doctor Ward Newcomb	But it, it needs to be actively engaged. They need to be actively engaged with. And we need to be working at it.
Doctor Maia Carter	I completely agree. I love that example you gave, where you may have 3 or 4 clinicians around the country and being able to simulate what's the optimal way for us to communicate, what tools can we engage so we can have effective communication about the health care that we're delivering. And, simulating that also with the patient and figuring out, the best way to, to optimize our tools.
Doctor Maia Carter	And so that way when we are, put in scenarios where we're having to collaborate, we've already been through it, we've already been through the simulation, and we can hit the ground running. So, this has been just an amazing discussion today. so fortunate to have both of you here on the Vlog for this episode. This is an area I feel like we need to learn more about, and I'm so grateful that you all were able to share with us today.
Doctor Maia Carter	So, we're going to close out with a topic that is very important to me. And it's joy. And I believe that if we do things that bring us joy, then we're better for ourselves and those around us. And what brings me joy is music and movement. So, I recently got into the discipline again of exercise, using pretty much daily now, and when I exercise with music, it just helps me just kick it up to that next level.
Doctor Maia Carter	So, I'm going to ask the both of you what brings you joy? Devin, let's start with you.
Devin Harrison	What brings me joy is seeing a progression of something that may have started as nothing and became something. And then you can look at the end of whatever project year, whether you're building a house or doing a motivation or, you know, learning a dance move and say, yeah, I did that. So that's what brings me joy.
Doctor Maia Carter	I love that. Doctor Newcomb. What about you? What brings you joy?
Doctor Ward Newcomb	Good answer. And I think, you know, echo, I think what Devin said, I mean, that's my whole life and the VA has been about trying to make a small difference and to be a to add to that, my wife's middle name is Joy. So, I

	always have joy in the house every day. And, but on a daily basis, to echo what Maia was saying, is that, particularly now we have a home back in Pensacola, Florida, where I grew up.
Doctor Ward Newcomb	I like to go riding my, fat tire bike on the beach in the morning, and I like to be out there at the crack of dawn when it's quiet and there's nobody else out there and ride along and look at the Ospreys and the eagles and the stingrays and everything else. And it's, That's my relaxing place.
Doctor Ward Newcomb	That's my happy place. It's where I grew up. And it's, you know, right at the water's edge. It's the prettiest place.
Doctor Maia Carter	Sounds, therapeutic. Love that. Awesome. Okay, well, thanks for joining us and let's stay connected. Thank you for joining us on this episode of Let's Talk Virtual Care. I hope that you found it. Inspire and value added. As you work to integrate virtual tools into your workspace, we welcome your ideas, your thoughts, and your suggestions for future episodes. You can view this episode or look at prior episodes by looking at our MS Streams channel.
Doctor Maia Carter	Just search. Let's talk virtual care. Please share this blog with your friends and your colleagues. We look forward to seeing you on the next episode of Let's Talk Virtual Care. I'm Doctor Maia Carter and remember dare to be innovative.