Paul:

(Music). All right. Thank you for joining me today. We have Dr. Diana Anderson, she's a physician and healthcare architect with Jacobs, Thomas Gray, a research fellow at Trinity House Research Center in Trinity College, Dublin, Ireland, and Dr. Des O'Neil, Center for Aging [00:00:30] Neuroscience in the Humanities, Trinity College, Dublin, Ireland. So thank you all for joining me today. Our topic we're going to really kind of dive into is the future of elder care and elder care facilities with a special emphasis on what we have learned from our current pandemic and the considerations to take into account for elder care. So to start, and Diana, I'm going to start with you. Can you explain the importance [00:01:00] of built environments for nursing home and it's impact on residents and particularly in light of pandemics and such medical considerations?

Diana:

Sure. Thanks, Paul. It's great to be here and to talk about this. We as a group have worked together in the past, Tom and Des and myself and Sean, who's one of our team members who couldn't be here today, but we've coauthored an article and thought we would center the discussion around [00:01:30] some of what we researched and wrote about for this article, thinking about resilience, nursing home design, and COVID specifically. I'd like all of us to comment on this question. I think it's an important one, Paul, but I think the importance of the built environment for nursing homes is extremely great and perhaps not well understood, but COVID has certainly brought to light the impact of the architecture on health outcomes.

We have fairly good evidence and research from the acute care environment, [00:02:00] from hospitals to show that the built environment can impact health outcomes with respect to whether you fall while you're in the hospital, especially if you're older, whether you sustain a medication error, whether you might become acutely confused or delirious, all of these issues impact older adults and we know that the environment in hospitals have an impact. We have, I'd say less research in the context of long term care and congregate living settings to, to show those same at outcomes, but for instance, with COVID, we sort of [00:02:30] are knowing now our data is showing us that older facilities with older models of design with shared rooms and larger congregate spaces for dining and socializing have not led to good outcomes in COVID.

And have probably contributed to infection spread and morbidity and mortality. I think it's important from my perspective to think about the built environment as a parameter of care and it'll be interesting to hear from Des, who's a physician as well whether we think about this in long term care in nursing home, but [00:03:00] the built environment can almost be considered a medical intervention in my mind and is very important, specifically where people live. We're not staying in a nursing home for just a few days like we are in the hospital. People are living there, it's a home.

Paul:

Yeah, it's interesting, and I'm sure we'll kind of maybe touch on this or even dive into it, but it seems to me as somebody outside looking in that perhaps medical, or elder care long term care facilities weren't necessarily, and maybe they were, [00:03:30] but weren't necessarily designed to handle pandemics or maybe that was maybe not at the forefront, and I wonder if now, because of COVID 19 shedding some light on some of the challenges, that we might see some changes in how that's approached, but turning

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not something you can sort of fit one into after the fact. They both have to be thought about together. The idea of spatial framework and scales [00:15:00] is important as architects to think about because I think traditionally, and Des can comment on this, but I think we've sort of viewed nursing homes as a standalone building and not always thought about what's going on around them in the community and even the urban framework.

These are homes that are integrated into society or should be potentially and how can we do that, and if we think about resiliency, it probably has to go farther than just the micro environment or just the building. These residents [00:15:30] who live there are interacting with the greater community, or we hope that they do. They have family members who are coming into these facilities and I think it would be great to see more of a focus on how to integrate that into communities and urban fabrics, and Tom can probably comment on this as well as an architect and he's done quite a bit of research in this area.

Tom:

Yeah. I mean, I think that is important and I think across numerous countries, we see nursing homes and care homes as very isolated from the community [00:16:00] and they tend to be built outside towns or on the outskirts or whatever because they're not seen as something that's inherent into what's going on or maybe that's what people want. They want to be removed from life and hustle bustle of what's going on. So I think first of all, just as Diana said, they're taking an almost, a planning and urban design focus first as that kind of macro scale is important. I mean, where actually are we putting them? Des makes a good point that we have a lot of existing nursing homes to deal with, but if we [00:16:30] say we think down the line of it and say, right, when we're planning new communities or we're planning new care homes, where should they go?

I mean, they should go where people live. They should go in people's communities. I mean, as I said earlier on, a sense of home or a sense of wellbeing associated with a home, there's a lot got to do with not just your house, but it's also your community, and that's shown over and over again when people are asked describe your sense of home or sense of place. They'll often start outside the home. They'll start in their community and when we talk about [00:17:00] aging at home, it's not necessarily aging in your house, it's aging within your kind of natural or home community. So that's really important. So what we've tried to do is take a systematic approach I suppose, and first of all, started that macro scale, which is the bigger planning picture.

Where would you locate a care home within a bigger community in terms of proximity to a person's home community, family, friends, access to public transport, all of these kinds of things, [00:17:30] and then almost working down to what we call the meso scale at a geographical scale, that would probably be the local community or the neighborhood and how does the care home actually interface with the community? It tends to be quite insular. They tend to be closed away like a lot of institutional buildings. How do they have a far more interactive, and I'd say almost relational approach with the community? These should be an important piece of local and social infrastructure. [00:18:00] So that's at that kind of community scale and at the neighborhood scale.

And then of course, drilling down into the building itself and designing the layout and components and all of that kind of stuff. That's kind of at the micro scale, but I think you need to think up and down through them all the time. I think as architects, urban planners, designers, you do that. You have a sliding scale almost that you work with and you tend to move up and down that scale quite comfortably, but I think we need to bring that to bear [00:18:30] on these kinds of designs and probably the word we could use here is a continuum. Are we creating a continuum of care or a continuum of living? Are people connected in a way that we want to be when we're living at home and not living in a care home? Can we move out and about in the community?

Is there a seamless transition? Now these are challenges of course, for a pandemic. In a way, what we're talking about here is this real integration, [00:19:00] but then a pandemic comes along and says, actually no, we want to close the gates and close the doors and protect people, but in the long run, that can be quite damaging for people's resilience. We know that resilience is underpinned and strengthened by your sense of who you are, your strength you draw from your family and so on. So careful that we don't throw the baby out with the bath water for want of a better expression.

Paul:

Yeah. It's very interesting, that concept of continuum and the [00:19:30] sense of home that you're touching on because you think about the average person who's entering into a facility like this. I mean, typically I would say, and I don't know if there's any typical case, but it's a person who is going from some sort of situation where they were independently living or maybe living in their own home. Maybe they had some help, but they were living in their own home and then suddenly, they're being put into [00:20:00] communal living. It can be quite a radical shift, and in going back to what Des was saying earlier about that so much of your health is really around subjectively how you feel and not maybe even sometimes more so than objectively.

So you're putting these patients in a situation or the current system is putting them in a situation where it is disruptive and there is maybe that, [00:20:30] it undercuts that sense of home and there's some anxiety. So it's interesting to think about this, that as

[00:22:00] And also to bear in mind issues around biophilic design, particularly whether it's hanging gardens or gardens outside. Hugely important, natural light and air to the greatest extent possible, and to bear in mind things like smoking and ability to, if you have a strict smoking ban within the building is to bear in mind that these are disabled people towards the end of their life and if that's their pleasure, that's their pleasure. So that this is, it takes a lot of convincing in many ways that this is something that will empower and make people better, [00:22:30] feel better, and make life better for staff. I think we often don't think about quality of life for the staff. I think for both residents and staff and the system, this is the way forward.

Paul:

Diana, let me bring you in on this. So you are what we refer to as a doc-chitect. You are both a doctor and an architect, which to me just blows my mind, so can you kind of weigh into on this idea [00:23:00] of what an ideal environment for nursing home residents might look like and what's going to help them thrive and be resilient?

Diana:

I'll try to wear both hats when I answer that or talk about it. Sometimes it's hard to wear them both at the same time, but I really liked what Tom said about the continuum of care and I think when we explain the sort of spatial scales from an architectural perspective, because I'm not sure how many architects are listening versus clinicians versus engineers, I think [00:23:30] I guess analogy to medical care and healthcare is the idea of providing individual care at the level of physician and patient, but then also public health, which has really grown as a field and I think that's where we address healthcare of larger groups and bigger societies, and so we're sort of doing the same thing, I think, with our design and thinking about the individual resident in their room or in this home, but also how does the home fit into the greater context?

How do we think about the wellbeing of all the residents and their families and the staff, even that work there? So just a bit of an analogy to [00:24:00] public health, which I think might be important. Public health is very important when we think about the pandemic. The ideal environment, I think Des hit the nail on the head when he talked about the greenhouse model and sort of domestic scales. Those are very important to consider. Geriatric medicine, we talk about geriatric syndromes that people might experience. I think resiliency can diminish as we age and we become more frail in the sense that smaller stresses can send us [00:24:30] sort of over the edge of the diff faster than if we were younger and had more resiliencies were built into our physiology, but in geriatric medicine, we talk a lot about the five M's.

So these are sort of a common way of sort of thinking about geriatric issues when we see patients, let's say in the clinic or in the nursing home, but we think about things like mobility. If they're using assisted devices, how can they get around? We think about fall prevention. We think about medications that they're on. We think about this idea of multi complexity. It's very common [00:25:00] that older adults have many different chronic illnesses going on at the same time and how do we balance that? We think of about another M, which is mind, and we think about mood, which is so important and we think about memory and problems with dementia as people age, and then we think about what matters most to people in terms of their goals of care, what they want to be doing with their time.

What's important towards the end of someone's life and I wonder, Des, when we think about design, we can think about these sort of five M's or these geriatric clinical syndromes and figure [00:25:30] out how the environment can foster and promote each one of them, and I think that it can and I think we probably even have some research in each of those areas that could help guide us in our designs, but I definitely agree that the way forward is to work clinicians and architects together and even expand it to think about those who are planning these sites and funding these sites and how can we all work together to develop these multidisciplinary solutions? I'm not sure we can work in silos anymore.

Paul:

Okay. And then my last question for [00:26:00] today is the flip side on the ideal environment, and it's what are the obstacles? What do we need over a home to be able to achieve ideal built environments for nursing homes, and so let me do this. Let me start with Des and then to get the clinical perspective, and then Diana, I'm going to ask you to weigh in on that, and then Tom, give us the architectural follow up as well, but so Des, starting with you, what obstacles [00:26:30] do we need to overcome?

Des:

Yeah, I think the first obstade is probably an attitudinal educational one. I was quite shocked in the mid to 2010's on the sites where we were working, a nursing home was designed without asking specialist dermatological nurses or the specialist geriatricians what their inputs would be. The rooms are fine, but it's very institutional and so I think [00:27:00] there needs to be developing an awareness that this actually makes a difference. It makes a difference to the residents. It makes a difference very likely to healthcare costs. It very likely improves resilience. Good design almost certainly will equate with better infection control. So I do think that it's around education and awareness. I think there's quite a significant amount of private chains involved so I think around [00:27:30] trying to reach in to commissioners, both state commissioners and also effectively, those who are commissioning from the private sector.

Teasing out exemplars, I think is very useful. For example, one of the things we did with the hospitals is we created a digital book of exemplars. So if people saw, I think there's a lot to be said for a templates models and I think Diana's, there's a bit of work back [00:28:00] to us still and I think Diana's point is very nice about the five M's. We need to provide hooks. Those of us who are embedded in this, we almost take for granted what we're saying, but I think there needs to be a sense of a realism, a pragmatism, this will lo b8q0.000009rq0.00000912 0 612 792(m)48(e)-2(E4Yo5(4(ne o)3(f)4va)4 reWhey f)8(o)4feJ(6.0 g0 G)

certainly is the case in Ireland and I argue it's probably the same all over the world, you have planning [00:32:30] applications being made to local authorities without, and they have really no filter. They have really no training to understand what's good or what's bad.

And then so it gets planning permission, and that, from a developer's point of view or a dient's point of view, that is locked down. You're really not going to change that design and what happens then is people get brought in, geriatricians like Des get asked what would you advise us, and it's the horse is running down the field at that stage. [00:33:00] So it's way too late. So we need a proper level of awareness and understanding and training at a planning level that when they receive these applications and they look at the designs, they go, well, no, this isn't right. This isn't working. So that's a major thing. So look, there's a lot of things, but there's certainly some major obstacles in terms of good, helpful nursing home design.

Paul:

So it sounds like some of it is changing the incentive model for like say architects so that it's, like you were saying with the awards and things [00:33:30] like that, so it becomes a little more attractive to really put their thought into what makes for good design, and also maybe perhaps at the municipal level or the planning stage level, having a physician on staff or somebody who can actually consult, so when these applications come in, then it's like, well, let's have Dr. Smith take a look at it before we approve this and that sort of thing. Des, [00:34:00] I think you might have had a comment that you wanted to-

Des:

Yeah, I suppose it's interesting. I'm fully with Diana on going evidence based as much as possible, but we also have, I suppose, a key issue now and I think the other element of this is actually curation and I think if you take a thought leader or very influential group like Jacobs, there's an issue of putting something out into a spotlight of bringing people into a new culture. Hans Ulrich Obrist [00:34:30] has written this wonderful thing, ways of curating. So I think there is a really interesting opportunity to look at how we can curate this artfully.

And in a sense, I have some faith that nobody went out and did evidence based stuff for making hotels nice. Nobody did evidence based stuff really to make restaurants nice and attractive. So I think the evidence is fantastic if you have it, but it's a [00:35:00] complex area to... It's very difficult to see how you could do randomized control trials and there's also this challenge that if you get a well designed nursing home, back to Richard Reming, it's very likely that arose from a well designed culture of care, so disentangling. So I think smart curation and promotion of the rewards is we need a little bit of genius around curation.

Paul:

No, I think that's very well said and you're right. [00:35:30] I guess as an average citizen, I don't think about it. You think somebody makes it restaurant or a public building, they're trying to create it aesthetically pleasing, but they're also creating it typically for younger people or people who are not an elder care facility constituency, which is going to have its own special medical needs on top of trying to just make the building look nice or function or whatnot.

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live. We were designed, we were created to live. So Diana, Tom, Des, thank you all so much. Very fascinating conversation and be really interesting to see how [00:39:30] we shift elder care facility design and built environments as of move forward, hopefully getting this pandemic behind us. So thank you so much for your time and energy today. Appreciate it.

Des: Thank you, Paul.

Tom: Our pleasure. Thank you.