Jill Harrison, PhD:

Hi, this is Jill Harrison, executive director of the National Institute on Aging IMPACT Collaboratory at Brown University. Welcome to the IMPACT Collaboratory Grand Rounds Podcast. We're here to give you some extra time with our speakers and ask them the interesting questions that you want to hear most. If you haven't already, we hope you'll watch the full Grand Rounds webinar recording to learn more. All of the companion Grand Rounds content can be found at impactcollaboratory.org. Thanks for joining.

Susan Mitchell, MD, MPH:

Hi, I'm Susan Mitchell. I'm the principal investigator of the IMPACT Collaboratory. I'm here talking with Dr. Katherine Courtright, I think you go by Kate, and we're picking up the conversation after her excellent Grand Rounds for the IMPACT Collaboratory that was entitled "Electronic Nudges and Pragmatic Trials to Improve Hospital Palliative Care Delivery." And welcome, Katherine.

Katherine Courtright, MD, MSHP:

Thank you. I had so much fun. I feel like I was talking to my people, and a shared passion always feels good to delve into.

Susan Mitchell, MD, MPH:

Yeah, it was great. I mean, so much of your work and what you presented really resonates what we're trying to do at the IMPACT Collaboratory, including trying to simplify interventions. Although, we learned yesterday that even simple nudge interventions are not so simple when you're trying to embed them into a healthcare system and trying to study them really in an experiment.

One piece of the conversation I wanted to pick up on, and caught my attention when you were talking, is the issue of integrating health equity into the conduct and design of pragmatic trials. And that's something we've been really interested in in IMPACT and trying to do some foundational work in that area. And what we've realized and have tried to provide guidance around this, is each one of those PRECIS domains on the PRECIS wheel really has health equity considerations when you're designing a pragmatic trial.

And I just wanted to focus on the piece around intervention delivery and fidelity, which you talked about. In the real world, we know there's inequities in how healthcare is delivered. And in fact, in a pragmatic trial I did in nursing homes, where we required the nursing home staff to implement the intervention or deliver the intervention, we saw mirrored in that the exact same health inequities that we see in clinical care, whereby there was less delivery of the intervention to black nursing home residents compared to white. So, one would think a little bit that in the type of nudge interventions you're doing, where the nudge is delivered by the electronic healthcare system, that maybe some of that is removed. But still, I'm interested in your particular take on health inequities and delivery in nudge ePCTs.

Katherine Courtright, MD, MSHP:

It is such a challenging topic to think through and, as I shared yesterday, my thinking has evolved. Because, like anything, I thought initially it was as simple as, if we systematize putting this information and decision framework in front of clinicians and bring patients systematically to their attention, then that should mitigate inequities in delivery. But that feels like one piece of it, because downstream from that nudge, as I shared, is a decision that has to happen. And so, the clinician is still bringing to bear implicit biases and other things that influence that decision that can overwhelm the nudge effect. And

that is not addressed with the nudge directly. And I think it has to be intentionally studied as part of pragmatic trials, and potentially even more so as part of the pre-implementation effort.

The obligation is on us to make sure we don't wide scale implement nudges that exacerbate inequities, certainly. And if anything, keeping it status quo isn't ideal either. We should really be working to mitigate. That's a high bar when there's equity, I'll say, levers at each aspect of the intervention. And I think where we're really not clear on what's happening is that second piece, the nudge to patient equity. And then layered into that, as I mentioned, is even if the nudge impacts decision-making more equitably, and palliative care is then delivered more equitably, is it delivered with the same fidelity across?

And just those layers are incredibly challenging, as you know, to tease apart in a real world existing data framework for pragmatic trials. When I write proposals, I acknowledge what we can measure and what we intend to get at, but there's almost always a limitation of what we're just not going to know mechanistically at least in these paradigms.

Susan Mitchell, MD, MPH:

Yeah. It really is interesting because it's like, in this case, where does the researcher's responsibility begin and end? In our study, I wish we would've been monitoring along the way, because it actually was the delivery of the intervention that was, there were inequities, and that wasn't okay. But in these nudge trials, you're delivering the nudge and then it's the usual care aspect where the health inequities come in. And so, where does your responsibility come and go?

I think one thing that we should all try to do a priori is maybe build some specific health equity aims into these types of research to better study them, not just look at it ad hoc, in retrospect, to actually think ahead and build some health equity-focused aims. Which brings me a little bit to, a next question is whether we begin to power and plan the analysis around subgroup analyses like these. So, for one of your studies where you're nudging to do the palliative care consult, what would it have taken to do a stratified analysis to see the difference in the black and white groups?

Katherine Courtright, MD, MSHP:

Yeah, I completely agree. And this is just another evolution in our thinking. Scott and I just were very fortunate recipients of a large PCORI award in which we did power on our aim two, which was specifically around identifying or, at least, looking at heterogeneity of treatment effects with an equity-focused lens and framework. And that that is how we powered the study, not on the main effectiveness aim one, because it felt like the field needs to take that step forward and not have it be a secondary thought, like you said. Just interesting, but that precision may not be there and that doesn't feel good anymore.

Susan Mitchell, MD, MPH:

Is that a pragmatic trial, the PCORI grant?

Katherine Courtright, MD, MSHP:

It is. It's taking many pieces of what I talked about yesterday, and lessons learned, and where we hope to fill some of the pain points on lack of resources and access to specialty palliative care in many hospitals that can't support something like a wide-scale default promoting primary palliative care. So, that particular pragmatic trial is going to be conducted in two large health systems across the country over, I think, 48 hospitals. It's a parallel cluster, which is exciting because we have so many stepped wedge designs and they have their limitations. I'm quite excited to do a parallel cluster trial. And the

comparisons there are trying to fill this understanding of for whom, so which types of patients, subgroups. For whom does training up generalists with a CAPC curricula versus specialists...? So nudging one of those two types of palliative care delivery versus a usual care paradigm.

As you know, arguably generalists can bring really wonderful palliative care to the bedside, but we need to overcome many of the environmental and sort of practice barriers to do so, including knowledge and efficacy in doing it. But they have a much greater reach. There's a much less access restriction to your primary team. But at the individual level, specialists are likely more efficacious, but they have a much more limited reach. And so for whom is it appropriate to nudge primary palliative care? And perhaps we can start to hone in on targeting specialists in a more thoughtful way. So, that trial is just in its implementation infancy and only reinforcing what I already know to be true, which is challenges will abound.

Susan Mitchell, MD, MPH:

Well, congratulations on getting the grant, I think.

Katherine Courtright, MD, MSHP:

Thanks, yeah. Right [Laughs]

Susan Mitchell, MD, MPH:

I'm sure we'll learn a lot from that. That's the expression we'll use for now. Switching gears slightly more to contextual issues. IMPACT is focused on pragmatic trials in patients living with dementia, and we appreciate the trial that you did in the advanced dementia group in the hospitalized setting. I have built my career looking at advanced dementia and improving outcomes for that. And one thing we've learned along the way that generic palliative care especially, depends where you are, tends to be more oncology focused in the palliative care specialists. I think this is evolving, but are a little less attuned to the specific needs of people with advanced dementia in that group.

And I think in your study you just used the palliative care team and maybe they're particularly trained to do it. We actually started a special palliative care consult service for advanced dementia patients in Boston, but now our colleague, Laura Hanson's doing a full-blown randomized trial on this. So I just was interested in your take in that particular study. Did you do any specific training with the palliative care doctors around adjusting their consults for advanced dementia, and what was your experience, and maybe how the intervention was implemented with that particular barrier in mind?

Katherine Courtright, MD, MSHP:

For the REDAPS trial that I spoke about, we did not do any specialty palliative care team training. It was a very pragmatic, flexible intervention delivery. In the PRECIS-2 wheel, we said if the default was not canceled and you got a consult for this patient, you would conduct that consult as you normally would. And part of that was wanting to both promote autonomy and pragmatism around what the teams were going to do. And saying you're the expert and you will go deliver a consult the way you normally do and adjust to whatever needs and patients and families you meet. And somewhat informed by the amazing trial by Judy Nelson in the ICU on chronic critical illness, they structured family meetings at various time points thinking that this was a very high need population. But the way they did it was they structured what needed to be covered in the family meetings by the palliative care teams, and very variable and low adherence to the components that they had wanted to touch on because it wasn't naturally how the palliative care teams communicate.

So that being said, I didn't get into all the details of that qualitative follow-up study with hospitalists about dementia and palliative care consultation. But one thing I found just fascinating and troubling at the same time, was one of the really strong indicators that they would not consider consultation of an expert was when family was not as available and not as present. For the dementia population I found that really striking because that, in fact, might be an indicator of even more need for communication and support and collaboration when families are either working or not as involved and patients can't advocate for themselves. And so I think those are the seemingly minor implementation context that to your point, might require a different approach. Maybe there isn't a universal nudge that just works for all populations.

And one of the reasons we want to power on subgroup analyses is because it may in fact matter, not just to your diagnosis but family support or other components around your particular serious illness that how your clinicians respond to the nudge. So I think dementia is really interesting in that way, in that you rely so much more on caregivers, and family and how clinicians think about that when they think about... And they're probably less likely to deliver primary palliative care when they can't reach family as easily, or they're not at the bedside during rounds. And again, that might be the patient who needs it the most. And so how do we sort of navigate that might have to be tuned in and unique to that population.

Susan Mitchell, MD, MPH:

One thing we've thought a lot about and have come up against the last few years in funding projects is the dyadic nature of dementia and how that introduces a lot of challenges for pragmatic trials at many levels, from identifying who you're targeting using an EHR, to delivering the intervention and who gets it, to even outcome ascertainment. So it's really complicated. I always thought about nudge. The word nudge is so close to the word noodge.

Katherine Courtright, MD, MSHP:

Maybe that's on purpose there.

Susan Mitchell, MD, MPH:

Anyways, it is like a noodge intervention. We're going to noodge you a little bit. So anyways, thank you very much for all your contributions, and your fabulous work, and for presenting at IMPACT. And we really look forward to this continuing body of work that you're doing and your contributions to the field.

Katherine Courtright, MD, MSHP:

Thank you. It was absolutely fantastic, and I hope to continue to be involved in the Collaboratory along the way.

Susan Mitchell, MD, MPH:

Oh, we do too. Thank you so much.

Jill Harrison, PhD:

Thank you for listening to today's IMPACT Collaboratory Grand Rounds podcast. Please be on the lookout for our next Grand Rounds and podcast next month.