Jill Harrison (00:02):

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.

Jill Harrison (00:30):

Hi everyone? This is Jill Harrison, Executive Director of the NIA IMPACT Collaboratory. I'm joined today by three wonderful people and can I just say powerhouses and health services and longterm care research? Dr. David Grabowski, professor of health care policy at Harvard Medical School, Dr. Susan Mitchell, professor of medicine at Harvard Medical School and senior scientist at Hebrew SeniorLife. Dr. Vince Mor, professor of health services, policy and practice at Brown University School of Public Health. And doctors, Mitchell and Mor, you're principal investigators of the IMPACT Collaboratory. So, thank you so much for joining me today.

Dr. Vince Mor (01:07):

You're quite welcome. It's our pleasure.

Dr. David Grabowski (01:09):

Yes, thank you.

Jill Harrison (01:11):

So this past week, the three of you teamed up for a special Grand Rounds on the topic of COVID-19 and nursing homes and pragmatic research responses to the crisis. This Grand Rounds was so well attended, it was heartwarming to see more than 300 plus attendees. Clearly the impact of COVID in nursing homes is important to folks, and there's a great deal of urgency there.

Jill Harrison (01:35):

You began your Grand Rounds with a very touching moment of silence to really ground us in the heroic efforts of longterm care staff, as well as the loss and suffering and catastrophic impact that COVID is having on older adults, particularly in congregate living environments like nursing homes. So, Dr. Grabowski, I'd like to start with you. You've written about this issue in JAMA Insights and been many other places interviewed on major news networks. Can you summarize for our listeners why nursing homes are so vulnerable to COVID?

Dr. David Grabowski (02:11):

Sure. So, nursing homes are really ground zero for COVID. Let's start with the obvious. This is where older adults and older adults more importantly with chronic illness, disproportionally live. They live in close quarters to one another. So, as staff move from room to room providing high touch care, remember these are very intimate services that caregivers are providing, bathing and dressing and toileting. It's that high touch care that really defines longterm care, but it also is the reason that this virus spreads so quickly within buildings. It's elders with chronic illness, living in close quarters with staff kind of caring for all of them. So, it's been really challenging to contain this virus once it gets started in a building.

Jill Harrison (03:02):

Thank you for that. And you know, you've mentioned in the Grand Rounds that the virus is spreading in nursing homes in spite of lockdowns. And we've heard about states such as Connecticut, for example, that are dedicating certain nursing homes as COVID only facilities to help mediate that spread. What other innovations are you seeing out there?

Dr. David Grabowski (03:25):

Sure. So, I think the most important innovations, and it's really not that innovative, it's actually pretty basic, it's simple testing. We need a widespread testing of all staff and nursing home residents, if we're really going to contain this virus. So, I think first and foremost testing is step one. If I could go a little further then, and also not much of an innovation, very basic, but really important is just good old fashioned infection control. This means washing hands, this means having sufficient personal protective equipment for the staff. You'd be surprised at how many facilities still lack adequate PPE. So, those are kind of 1A and 1B.

Dr. David Grabowski (04:10):

The next place I would really look is towards supporting our workforce. The staff, as you've already mentioned, are incredibly stressed and challenged. And we need to do more to support them both in terms of what we pay them, how we're valuing them, making certain that they have adequate testing and PPE. But then also if they're unfortunately become sick, let's make certain they have paid sick leave and other supports such that they can get well and keep other staff and residents at the facility healthy. So, those are some things in addition to the kind of COVID specialized facilities that will really help contain further outbreaks.

Jill Harrison (04:58):

You've mentioned the workforce and in particular, how it's been decimated in nursing homes, the strain on, for example, certified nursing assistants, the lack of perks and protection. What changes at the policy level do you anticipate coming out of all this in terms of workforce resiliency?

Dr. David Grabowski (05:20):

I really hope this is sort of a change, a major change in how we think about these direct caregivers. I think we've undervalued and underpaid them for a long time. This workforce makes close to minimum wage. They're disproportionately women, disproportionately minority, disproportionately immigrants. And so, there's a real need to put a lot more resources into this workforce.

Dr. David Grabowski (05:47):

So first and foremost, I hope that we're going to pay them better going forward. And that's something that Vince has actually studied in some of his prior work with wage pass-throughs at the state level. I would love to see us do some federal pass-throughs, wage pass-throughs, where we're providing more dollars to support this workforce, offering them all the benefits we just mentioned. But then the final point I'd make is how do we make certain that this profession is actually a ladder towards maybe becoming a licensed practical nurse or an LPN? How do we invest in this workforce through education credits and really supporting them? Not just in their current position but as a way to move up in the nursing workforce. I really want to see us kind of grow this workforce going forward and better pay and better upward mobility are two ways we can do that.

Jill Harrison (06:41):

One final question for you before I pivot to doctors, Mitchell and Mor, you mentioned that a national reporting system is coming soon. When is it coming in and why the delay?

Dr. David Grabowski (06:54):

So, it's supposed to be online by the end of the month, so that's everything we're hearing. This is really something that should have been online from the beginning. So, by national reporting system here, we mean a national system that tells us across every nursing home in the country, how many COVID cases does that facility have among the residents and the staff? And then also how many deaths that have occurred among the residents? We need that information, not just for family members who have loved ones in these facilities. Too many family members don't know what's happening in the facilities, but we also need this information from a public health perspective. Researchers like doctors, Mitchell and Mor and myself, we want to study this. We want to learn kind of what's happening around the country in terms of best practices.

Dr. David Grabowski (07:44):

If we're going to study this and learn from them and ultimately apply those best practices, we need the data. And we just simply don't have that data right now. I don't know why to your question it's been so hard. I think initially this was pushed out to the states. Some states were quite good with reporting, some states weren't. I think very quickly the federal government took a lot of criticism and I think pivoted here to realize that these are data that need to be national, and we need greater transparency.

Dr. David Grabowski (08:18):

So, hopefully by the end of the month, we have those data, I will say quickly, we know those data are never going to be perfect. There's a lot of reporting issues from facility to facility, a lot of asymptomatic cases, and that's always going to be a challenge. But if we're ever going to try to form like a broader sense from a policy perspective of what are we facing here in terms of number of cases, the number of fatalities, and where our efforts working and not working, we need the data.

Jill Harrison (08:48):

Well, that's a great segue to Dr. Susan Mitchell in terms of, we need some data about what's working. So, Dr. Mitchell, you shared some of your work and data about a rapid, pragmatic research approach in response to the COVID crisis. In particular, you shared some work about advanced care planning, SWAT team at Hebrew SeniorLife. Can you tell our listeners a little bit more about the program so that folks could replicate it if they're interested?

Dr. Susan Mitchell (09:17):

Right. So, thank you for asking about that, Jill. So, the program I introduced during Grand Rounds took place at the place where I work called Hebrew SeniorLife, which is a healthcare organization in Boston that does many things. It has a number of clinical service lines, including assisted living, independent housing. But particular to this project, we have about 620 longterm care beds or nursing home type beds in the organization.

Dr. Susan Mitchell (09:47):

We're also fortunate that it's got a strong academic mission at Hebrew SeniorLife. And so, we actually have a research institute embedded into this organization, the Marcus Institute, where I work. And even at the best of times in normal circumstances, advanced care planning and trying to provide care that's goal-concordant. In other words, providing care that aligns with what patients and their families want is a priority in all longterm care settings.

Dr. Susan Mitchell (10:21):

But this has become especially acute during the COVID-19 crisis, because if these frail elderly patients get afflicted with COVID-19 with their number of comorbidities in general frail status, they're the most likely to get the sickest. And in particular, get respiratory distress that would bring up the possibility of them going to the hospital and being put on a ventilator, and just like, they're likely to get the sickest, they're also the least likely to get any benefit from such aggressive care.

Dr. Susan Mitchell (11:00):

So, it became very important during COVID-19 for the longterm care population, their families, to understand what the course of this disease was if they were to get it and get very sick, what are the risks and benefits of these different types of medical treatments? And really understanding that if they did get sent to the hospital, they likely would not benefit from the most aggressive care. So, we happen to have a robust palliative care team at Hebrew SeniorLife, again, unlike most nursing homes. And this was really... this project was really put forward by the director of that services because they had over 600 longterm care residents that they wanted to make sure that their advanced directives were up to date and in concordant with what the patients and families want, and informed by their COVID-19 experience.

Dr. Susan Mitchell (11:57):

But at first it just felt like a lot of chaos, so they didn't know where to start. They came to the Marcus Institute, they said, "Hey, can you help us identify those resonance who are most at risk for going to the hospital and doing poorly with COVID-19 and then help us track our efforts while we try to get updated advanced directives on those patients?" So, what we did is we leverage the electronic medical record at Hebrew SeniorLife. And we're able to identify all the residents who lacked something called the do-not-hospitalize order, which is an ord... medical order that can be put in the chart that says, "Even if you get acutely ill, they prefer to have their care directed towards comfort and receive care in the nursing home." And so, the team felt that those people without DNH orders really were the first people that needed to have a conversation around this with COVID-19.

Dr. Susan Mitchell (12:55):

So, we leveraged the electronic medical record. We were able to generate those lists, which ended up to be about 300 on April 13th, 354 residents that did not have a do-not-hospitalize order. And then we automated a system where every day at 8:00 AM, we sent out the palliative care team, an ongoing list of remaining residents without DNH orders. And every day they called up their family members and had conversations and chipped away at the list every day to the point where, as of today, actually a third of those residents who did not have a DNH order now do have a DNH order. Unfortunately like a lot of places, we've had a lot of deaths at Hebrew SeniorLife and some hospital transfers, but no hospital transfers among those who had a DNH order. So, that's the program.

Jill Harrison (13:49):

And that's so impressive to hear that, that you have not had folks transferred who have the do-not-hospitalize order. I think, so often you hear folks saying, "Unless you come willed in with your advanced directive kind of safety pin to your shirt in the emergency room, it's unlikely sometimes that these advanced care plans can be followed. So, it appears that there's some hardwiring within Hebrew SeniorLife to make sure that preferences are honored and some great spot checks. You mentioned the fact that the events, the SWAT team emerged as a pragmatic approach, because it was driven by stakeholder priority, in particular, the leader from the palliative care program. What practical advice would you give healthcare systems and researchers to improve their partnerships and relevancy to each other?

Dr. Susan Mitchell (14:39):

Yeah. So, this was... part of the reason I think this program works so well because it was driven by a clear clinical need. So, even the little bits of tracking data that we wanted to add to the process of calling families, and then recording the outcomes out of those phone calls, perhaps in normal circumstances, busy nursing home providers would just find it annoyance to have yet one more piece of tracking or paperwork. But because this really came from a request from this clinical team, they really took it seriously. And weren't bothered by the fact that it took another five minutes to fill out some sort of tracking form. So, I think the notion that this pragmatic research and pragmatic interventions and truly get into the clinical workflow, any little bits of processes that you introduce into implement the intervention to get done and really adhere to, has to have some meaning for the people in this case, the clinical providers implementing it.

Dr. Susan Mitchell (15:42):

Another really practical piece that actually we could absolutely not have done this project without is some foresight into the programming of our electronic medical record. As I mentioned, we were able to identify people who had a do-not-hospitalize orders and those that don't in order to create this triage list. And we only had that because someone who created our clinical electronic medical record had the foresight to actually upload items from the most form, the medical orders life sustaining treatment form individually. So, they had a field for do-not-hospitalize, do-not-resuscitate, no intravenous fluids, et cetera. So, each of these were individual fields.

Dr. Susan Mitchell (16:27):

So, we were from the research point of view and from the informatics point of view we're easy to just simply identify each person who didn't have a DNH order most. Nursing homes and nursing home systems don't necessarily have that standardized method of recording the advanced directives in the medical order set. So, I think having a lot of foresight into creating electronic medical records with not necessarily research in mind, but tracking and identification of patients with certain characteristics was quite important.

Jill Harrison (17:05):

Well, thank you so much for sharing that important work with us, and it's the outcomes that you've achieved in such a short period of time are really astounding.

Dr. Susan Mitchell (17:15):

Thank you.

Jill Harrison (17:16):

Dr. Vince Mor, I'd love to transition to you and your work with Genesis HealthCare, a large longterm care provider with facilities across the United States. You're working with them to understand the spread of COVID within their communities. And I'd like for you to tell our listeners, what have you discovered in terms of some of the facility level characteristics that impact the prevalence of COVID in these communities?

Dr. Vince Mor (17:43):

Sure. Thanks very much, Jill. So, going back to what David Grabowski said at the end of his comments about data, we are in a data deficit right now with respect to who gets COVID, which facilities get COVID, how much they have and what they have done about it. And so, early on in the pandemic, I reached out to colleagues, the senior leadership at Genesis HealthCare has worked with both Susan and myself in the past on large pragmatic trials and have really embraced research. And so, they have facilities in 25 states in the country. And so, we reached out to them to try to see what we could do in terms of helping them understand their data. Most nursing home companies, even large ones, they might have a fairly robust IT system or IT group, but they have virtually never have a research group, particularly one that focuses on research within the own... the company itself.

Dr. Vince Mor (18:48):

And so, we knew that they were working very hard on issues related to the management of COVID as every day, a new one of their buildings became... I heard somebody was infected. And so, we set up an arrangement, so to transfer the data from their entire electronic medical record every day. And then work with them on an ongoing basis, weekly biweekly meetings to actually understand the questions they're asking what they need to make operational decisions, and then how then we would work together. My colleagues and I would work together with them to come up with analysis to make that possible. So, we were working with them to help them solve their particular issues and challenges to interpret their data in that sense. So in that sense, they called on us. We made an arrangement together to help them solve a real pressing problem, which I think is a very important solution and it continues to work well.

Dr. Vince Mor (19:50):

So, the first thing we did was to try to understand which one of their buildings across the country ended up having a conversion to somebody, some patient becoming positive. Well, the press has actually really maligned many nursing homes because of the fact that they were... they failed in their mission to protect their patients. What we see in the data is that if you are in a nursing home in a county, which has a high number of positive COVID cases per 100,000 population, you're much, much more likely to have a positive COVID case. First from the staff and then almost always followed by patients. So, that population density as well, because urban centers and across the United States have been the hardest hit initially with COVID, and Genesis does not have any facilities in New York. So, even exclusive of New York, it's been a big issue in Connecticut, Massachusetts, New Jersey, Michigan, et cetera.

Dr. Vince Mor (20:58):

The other factor we found, which was really important as well, speaking to the structure is it larger facilities. Facilities with 200 or more beds had a much higher number of patients with COVID as well as a higher likelihood. And that's again on reflection, it's because of the traffic. As more staff come in, you increase the numerical risk for the transmission of the virus to a resident. And once it's in the building,

it's very difficult to shut it down, partly because staff will transmit from patient to patient. And then partly because staff might also pick it up or it's on surfaces that they then transmit into the next room or the next room or the next room. So, it's a very insidious virus in the sense that people will be shedding virus for days before they become symptomatic. So, just taking somebody's temperature when they walk in the door is insufficient.

Dr. Vince Mor (21:56):

And by the time at particularly early in April, when a lot of this stuff was happening in many facilities, by the time a patient was tested as positive, they've already been symptomatic for a day or so, which meant they had been symptomatic for five, six or seven days. And then it's two or three days until the test got back from the state health department. So, that's eight or nine, or maybe even 10 days after the patient had the virus transmitted. And by that time, a lot of the buildings were positive.

Dr. Vince Mor (22:28):

David gives an example of a facility in Massachusetts, where there was a really big challenge. A bunch of patients were positive and people were trying to figure out what to do. Well, they said, "Well, maybe we'll make some kind of a special wing for a COVID only wing." As they then did universal testing in that building they found 60, 70% of all the residents already were positive and no one even knew it because they were asymptomatic. So, it's a very complicated set of issues and you need data to make inroads in that level of understanding.

Jill Harrison (23:08):

It's definitely complicated. And you discussed that your future work will evaluate the practice of changing rooms or moving neighbors and roommates away from someone who tested positive and or is displaying symptoms. And we've heard anecdotally about managing these hot and cold zones and the challenges of isolating residents in particular, people living with dementia, convincing them, for example, to stay in their room with redirection restraints, antipsychotics et cetera, to keep them in their respective [inaudible 00:23:43] zone. Can you talk a bit about how pragmatic research can inform decision making around these complicated issues?

Dr. Vince Mor (23:52):

So, yeah, one of the things that we're doing with our colleagues at Genesis is actually their idea. They've actually developed what they call heat maps, so that every day the infectious disease nurse and together with the medical director or the regional director would actually work out a map based out every single room in the building. And they would say, they would color code who was still negative, who was positive but asymptomatic, who was positive but symptomatic.

Dr. Vince Mor (24:18):

And then ultimately who had died in which rooms so that they can actually document the spread and begin to then have the information around which to make decisions as, do you cohort? Do you actually take the patients who are positive and move them over into one wing where there are other positives? That is normally what you'd want to do, but you actually must have as David suggested, literally testing virtually every day, because the last thing in the world you want to do is move somebody who you think is negative away to a section of the building where there is no one who has positive case already. And have that person be actually positive, but asymptomatic not yet tested and then in fact, other people in that area.

Dr. Vince Mor (25:04):

So, any decision to actually move into the direction of cohorting within a particular building has to be accompanied by really rapid testing and knowledge so that you understand who is susceptible, who might benefit from a move for the whole population.

Jill Harrison (25:24):

Thank you for that. My final question for all three of you, if you would, how does all this learning change nursing homes? Where should the industry and longterm care providers, researchers focus it's next steps? Dr. Grabowski, we'll start with you.

Dr. David Grabowski (25:42):

Sure. So, I think there's a lot of possible research projects going forward and obviously ways in which the industry might change in response all this new knowledge that we're going to gain. I think I would start by saying first that a lot of, kind of the issues right now in nursing homes really stem from the problem that Vince just identified, that it's not about a few bad apples out there. It's really a system problem, and we need to invest in the system. And I think that the first place is really in terms of what we pay for nursing home care. We've under invested in these services for a long time. Remember Medicaid is the dominant payer of services in this country.

Dr. David Grabowski (26:27):

We have paid below costs in most states for quite a long time, and I've... and Vince and Susan and others have argued we get what we pay for. And so, we really need to invest a lot more in these buildings. [inaudible 00:26:41] more spending wouldn't have prevented COVID, but I think it would really fortify our response right now. I think these facilities are really struggling, not just in terms of the health of the residents, the morale of the staff, but also just the financial health of the entire industry. And so, I think at a high level, we're going to need to really start supporting nursing homes a lot more going forward. I hope then going back to what I said earlier, I think supporting the staff, a lot of those dollars that flow into the sector need to go to those direct caregivers. We've once again, undervalued them and underpaid them for a long time. And so, putting a lot more dollars into that workforce is really going to be central.

Dr. David Grabowski (27:25):

And then the final thing is kind of, we're going to have to go back. We had made some real strides in nursing homes in terms of improving quality of life for the residents. This has been a huge step back. We've had residents living isolated in their rooms here for, going on what? Six weeks now. That's been incredibly sad and maybe an under-reported and under-covered part of this story of, how do we make certain that we connect these residents with their families, with their life once again?

Dr. David Grabowski (27:55):

And I know we're all making sacrifices right now, but if we think our life is limited right now, imagine if you were an older adult in a nursing home. So, some of that is going to happen virtually, but how do we ensure that we kind of reengage nursing home residents with the communities that they live in? And I think we'd made some strides there, but we've made some huge steps back and kind of the spirit and as a way of kind of fighting this virus. I think we need to, once again, begin to push towards a better quality of life for the residents. So, those are some thoughts.

Jill Harrison (28:31):

And they're good ones. I love the idea that we must not allow this kind of the [inaudible 00:28:38] institutional lies to creep back into nursing home life after so much progress in some ways. Doctors, Mor and Mitchell, anything to add in terms of where we need to focus next?

Dr. Susan Mitchell (28:51):

Yeah. I mean, I think I echo a lot of what David said. As you know, I hope this just bring a lot of attention to the plight of nursing homes in general, and particularly when they're stressed like this, so that when we watch these clips sometimes with Dr. Grabowski on them and the nightly news describing what's going on in nursing homes that people are looking at that and saying, "That could be me. That could be my wife. That could be my parent," and really translate some of the need. We see the nursing home sow into opportunity for improving that care and pushing more resources to nursing homes.

Dr. Susan Mitchell (29:29):

I think it also really highlights the health inequities in healthcare in general, and also within nursing homes that I hope spurns on more attention. And just with relation to the project I did, I think, again, it's really underscores the need for advanced care planning, not just in the worst of times, but in the best of times. And I'm sort of curious to see what happens after COVID settles down. And some of these folks, who've had a deeper conversation around advanced care planning, whether they'll actually continue on with the decisions they made, for example, not to hospitalize and receive care on site. And for those that do want to continue to have their care focused on comfort at the nursing home, I hope this crisis potentiates a much needed improvement in palliative care services that can be obtained right onsite in nursing homes.

Dr. Vince Mor (30:27):

Jill, let me just say, [inaudible 00:30:28] bring tie these two topics together that David and Susan raised. So, in the hospital and healthcare systems world people talk now about learning healthcare systems. The organization where Susan works at Hebrew SeniorLife, they have a research organization and the provider groups, the physicians, the nursing groups, as well as indicated by the example. They learned from the researchers, and the researchers in turn learn from them by engaging in pragmatic and practical everyday research, trying to answer real world questions.

Dr. Vince Mor (31:03):

We actually need that to be more broadly institutionalized in the nursing home environment. Not every nursing home is going to become a learning organization, but they can do much better if the staff are treated professionally, we're paying people better and there are proper alignments. So that they're able to ask a question that's not just, how do I get paid tomorrow, but how do I care most about the care provided to our residents, our patients, our charges? And understanding the value of research and knowledge in that process, and knowledge generation that they participate in generating and knowledge and integration that they take new knowledge and adopt it in their places of work. That's sort of a goal and in some sense, that's one of the goals of our IMPACT Collaboratory is to actually work with healthcare systems that are willing to, and are able to integrate and adopt new innovations and incorporate them into the workflow so that they become part of the DNA of the organization. That's in the ideal world, and if the conditions are right, we hope to help shape that in the future. So, thank you very much.

Jill Harrison (32:20):

Well, Dr. David Grabowski, Dr. Susan Mitchell, Dr. Vince Mor, thank you so much for your time today. Thank you so much for your work. Please keep up the good fight and we're certainly sending our best to people living and working in nursing homes all days, but especially during this COVID pandemic.

Dr. Susan Mitchell (32:40):

Thank you.

Dr. David Grabowski (32:40):

Thank you, Jill.

Dr. Vince Mor (32:40):

Thank you, Jill.

Jill Harrison (32:45):

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.