HEALTHCARE INDUSTRY GROUP

What's Your Moonshot?
A Podcast Series Where World-Class Healthcare Leaders Seek To Solve Big Problems

University of Pennsylvania Health System Reaches for the Future: New Facility and New Systems of Care

Transcript

[00:00:00] Kevin Mahoney: What's next for Penn Medicine is not just treating the patient today, but treating the patient in the future. If you go up to our neuroscience for the Epilepsy Monitoring Unit, it's gathering data from patients 24/7 and they're using that to take care of the patient funnel. Simultaneously, we're sending out to the engineering school. The data scientists are going through all that information, de-identified of course. They're going through that information to see if they can detect something in the EEG waves, or other physiological monitoring.

We're also doing biospecimen, collections on the floor and matching those together. We're hoping that just like we developed cures for certain cancers, we developed the basis for the Pfizer, Moderna vaccine, we're hoping then in the future, the list of things that Penn has been able to impact will increase, because again, taking care of the patient today but also with an eye on curing or improving people's condition in the future.

[00:01:03] Narrator: Welcome to A&M Healthcare Industry Groups, What's Your Moonshot Podcast Series where world class healthcare leaders seek to solve big problems? Listen as we talk to today's Health System CEOs about the journey to achieve their moonshots.

[00:01:19] Larry Kaiser, M.D., FACS: Welcome to A&M, What's Your Moonshot Podcast. My name is Larry Kaiser, a Managing Director in Alvarez & Marsal's Healthcare Industry Group. I'm here with my co-host, the Honorable Secretary, Dr. David Shulkin. David, it's my pleasure to welcome Kevin Mahoney to the podcast. Kevin leads the University of Pennsylvania Health System, one of the country's leading health systems. Driven by our mission to improve both quality and access while innovating new systems of care.

Prior to ascending to the CEO position, Kevin had an integral and key role in leading the development and construction of the newly opened $1.6 billion hospital edition with over 500 beds and 47 operating rooms, the Pavilion in Penn Medicine's, West Philadelphia campus. Congratulations on the opening Kevin, and welcome to the podcast today.

[00:02:10] Kevin: Larry and David, it's so good to see both of you. I appreciate you including us. I'm proud of the new facility but also proud of what Penn's doing. I'm looking forward to sharing some time with you.

[00:02:20] David Shulkin, M.D.: Kevin, thanks again. I think for both Larry and I, it's really special to have you on because Penn is our home. We had the chance to work with you and watch you throughout your career just do amazing things for the organization. Thank you, and really for the city of Philadelphia and for the entire country and your leadership.

What this podcast is about, What's Your Moonshot, is about leaders like yourself, who really have great aspirations and other people get to see them changing healthcare. We wanted to talk a little bit about the new facility that you've just opened up. First of all, I wanted to find

out when did you start working on this? How long does a moonshot like this take from the beginning of when you first envision it to when you get to open the doors like you recently did?

Secondly, given that this is Penn's largest capital project in history, which is no small statement there, because the Penn campus is an amazing capital campus and that everyone in healthcare is talking about, "We don't need new bed towers, we don't need new hospitals, because all healthcare is moving outside of the hospital into the home," what were you thinking, Kevin?

[00:03:48] Kevin: Let's take the first one. I celebrated my 25th anniversary at Penn Medicine a couple of weeks ago. I remember working on this idea back then. The current hospital, University of Pennsylvania, was built, every 20 years or so we put up another addition, and they didn't quite fit together and technology changed over the time. It was really Dr. Kelly who started the vision of, "We need a new Hospital University of Pennsylvania." We had a little blip in our financials in the late '90s, then the great recession hit. This is something that we've been working on for quite some time.

In terms of the project itself, 2015 is when I would say that we committed to making this happen. We committed to making it happen through a new contract form called Integrated Project Delivery. We committed by putting nurses and doctors on the design team for the last five years. COVID hit and slowed us up a little bit, but it's about a five or six year-- a year to tear down the building, a year to get out of the ground and then four years to finish it off. We opened just two weeks ago.

More important, David, I think is your question. What's the matter with me? As everyone's talking about the move to virtual, the move to hospital at home, et cetera. We at Penn Medicine, strongly believe in foresight to delivery. The hospital care, increasingly, though ambulatory as you mentioned, 60% of our money comes from the ambulatory side. You think of the new hospital and likes of general, and the other great hospitals we have in the system, you have to do a lot of A&M visits to offset double lung transplants, cardiac transplants, cardiac procedures, advanced cancer care. It shows you how rapidly things are moving to the outpatient side.

Hospital at home, increasingly important and virtual. At the same time we're putting this building up, we also opened three new sites in South Jersey. We opened a New Penn Medicine, Radnor that's twice as big as the old one so we're doing both. We think we have to capitalize on all four of those locations, but our hope, and it's our belief, that's our mission, is to create new knowledge and you quickly disseminate it out to the community. You still need that advanced platform to create that new knowledge.

[00:06:30] Larry: That creation of new knowledge is something that Penn has been doing for a long time and obviously, will continue to do in the future. You mentioned this move toward outpatient which we certainly are all familiar with. You currently have, in the Center for Advanced Medicine, an ambulatory surgical center that is hospital-based. Do you have a freestanding ambulatory surgical center within the Penn Medicine Group?

[00:06:54] Kevin: We do. We have several throughout the region, one at Penn Medicine Radnor. When we moved across the street, we lost our site neutrality so that's a licensed surgery center. We have a number of ambulatory surgery centers. About half are licensed as freestanding and half are licensed as hospital outpatient-- because we still maximize the reimbursement where we can. A big part of our plan is to grow our regional ambulatory surgery centers.

[00:07:28] Larry: Because there's no question that patients would like to be closer to their own home where they receive care and so much of the surgical procedures that previously have always been done in an inpatient setting clearly moving to an outpatient setting, despite some of the confusion going on at CMS right now. Kevin, the new facility really sounds tremendous. I understand it was built to grow and adapt to the technologies of tomorrow, and that all the rooms have the capability to transition to an ICU-type room. Why was this important when you designed the building?

[00:08:06] Kevin: Larry, we had several guiding principles when we put this building together. One of which was future proofing. One of my very first jobs when I still had hair back at Bryn Mawr Hospital, was to tear apart the old tonsil unit. Because medicine changed, every kid hit their teenage years, they got the tonsils out so we had a 14-bed tonsil unit. When we put up the New Pavilion, our goal was that as medicine changes, technology changed, we wouldn't have to change the physical structure, but we could adapt, on the fly because of how rapidly things are changing.

As Dr. Kaiser mentioned, we made every room acuity adaptable. Every room can be an ICU. It added about 7% onto the cost, but our goal in the future is not to have to go back and renovate rooms, converting from MedCerts to ICU. We didn't have to guess. Another example, the floor to ceiling height is way over built, but that'll allow us, when we have to change out Wi-Fi to 5G or probably be 10G in several years. We want to be able to change that without ripping the place apart.

It was built, again with a capital skeleton that is highly adaptable to as changes come along. Another example would be reinforce the floors, because we've tested out the hyper fine, portable MRI, bedside MRI for head scan. It's quite heavy. We want to make sure that we could get that in and out of the rooms when it gets FDA approve-- when it's ready to go and not say we can't use that technology. Future proofing was a big part of it.

[00:09:58] David: That's great and Kevin, I think, how important was it for you to involve the doctors and nurses in the design process that you talked about to come up with all those things?

[00:10:10] Kevin: It was critical that I have several groups. One was the maintenance group. I put up a lot of buildings and the maintenance guys at the end always tell me, "You should have done this." We put them in early, we assigned two nurses full-time Kathy Gallagher and Kate DeSanto. They were the voice of truth because you'd sit there and I'd say, "This is how the workflow goes," and Kathy Gallagher would say, "No, it's not, this is actually how things work in the operating room." Then we had a number of hospitalists that were on the design team. Again, having the doctor, the last group David, I would mention that was critical is one of the first groups we went to was our patient family advisory council.

They gave us little things like, "I can't charge my iPhone because the plugs on the wall and the cord's only a foot long and I'm afraid I'm going to miss the grandkids call." We tried to get all that input up front. It allowed us to build a 30,000 square foot mockup of the floor. Then we installed GoPro cameras and we hired actors to be patients. We delivered food, we conducted code reds, and watching that video really allowed the architects to see how work was actually being delivered.

[00:11:41] David: That's amazing and again, thank you for sharing that on this podcast, but I think you might have a book in you one day to talk about the way to design these facilities. I think, just from a clinician's point of view, the fact that you're not going to have to move patients and transfer them from ICU's to regular floors, I think that's not only going to help you with efficiency, but it's a quality of care issue. I think that hopefully becomes a new standard.

Kevin, I just want to go back to something you were saying. I think that you were not sheepish about saying investing in inpatient facilities is a really important part of the way we carry out our mission. I remember back in the '90s when the consultants came in to us at Penn, they told us our bed size was going to need to be 250 beds because they used California-based utilization data, and of course that just turned out to be wrong. What is now the total bed count at Hop and are there new beds being added with the new facility in terms of have you taken other beds offline now?

[00:12:58] Kevin: David I use that slide still about if you apply California admissions per 1000 or bed days per 1000, Philadelphia is over-bedded, but there are other factors that go into that. Most notably, a number of hospitals in Philadelphia, 22, since 1976, have closed. We don't live in a static environment. We had about 800 beds before we opened the pavilion. We added 500, but we were then able to take out all the double beds in the old building. We took out some beds that really should have come off.

We're still maybe around 1000, 1050. It was an expensive expansion, but it wasn't a large incremental expansion of beds. It was more right sizing and putting the OR platform in. One of my favorite spots is the interventional cardiac floor. We know it's going to be more minimally invasive in the future. Whether the cardiac surgeon or the interventional cardiologist is going to control that, who knows? Rather in building two locations and having them compete, we put them in the same spot. Again, technology and science will push cardiac surgery where it goes, but we're not going to have to rebuild everything as that develops.

[00:14:40] David: Boy, that's fascinating. The other thing, Kevin, I was wondering about, building a hospital and the way you've done it, is a complex, challenging project in itself, but doing it during COVID is a completely different story, I'm not sure too many people have done that. I just wonder, were there any due considerations that dealing with a pandemic, opening up a new building, did anything change in your plans because of the impact of COVID?

[00:15:11] Kevin: I think it reinforced ideas that we already had. An example we know from COVID, we want to minimize the people in and out of a room. We were retrofitting old rooms to try to keep people out. The new rooms have a nurse server, we call it, so all the supplies get loaded from the hallway and the door gets closed, then when you're in the room, you open the door on the other side and you can pull the materials, you can pull the pharmaceutical for that patient because it's all prepackage and stocked in that space.

Some of the things you would have seen before with a lot of carts and personal protective equipment out in the hallway, that's now all enclosed. It works as an entry in without opening the door. We think that was a big part. The other thing that is working for COVID, wasn't necessarily designed for COVID, but the building is completely onstage and offstage.

Again, as the pandemic reinforced, it didn't teach us because we we've known it for hundreds of years, maybe thousands of years that people are infectious, it's limiting the patient staff contact by design. Again, we didn't start that way. We started that way to keep it quiet, but it's working really well for COVID. Then the other thing is that each room is Teleconsole, e-console capable.

Again, maybe the cardiologist doesn't have to go into the room if the patient's infectious, but you still want to have a conversation, there's a 72-inch video wall and there's a camera so the doctor can do his teleconsultation.

[00:17:03] Larry: From my own perspective, having worked in room 23 for 17 years, a tiny room, I'm jealous of the surgeons who get to work in these big rooms, these big magnificent

operating rooms that you now have. Seems like you've thought of almost everything but whenever you move to a new facility, obviously there are some little, some bumps on the road. How's it gone with opening the new facility? What are some of the lessons you've learned throughout the process, from development of the idea through the opening and then what's next for Penn medicine, Kevin?

[00:17:37] Kevin: Larry I think the main thing, patient way finding. No matter how much you think you have it down. We walk the hallways. We learn where everything is, where every quick elevator ride is and the like, for a patient, particularly coming into an academic medical center from 100 miles away, 150 miles away, it's still confusing.

We call things, urogynecology, they call it female gynecology, we call it gastroenterology, they call it the stomach doctor. We've had to place a number of people along the way, it's a very large building, to put more personal way finding in place. I wish I had anticipated that better but that's an ongoing challenge.

The other thing is simply people start off so excited, they're energized and you go through that post let down a little bit, and just trying to keep everybody's morale up, enthusiasm up, we're fighting the same, workforce issues that everybody across the country is, sustaining that is just a reminder, once the ribbon's cut its back to work and as leaders, we have to make sure that people understand our mission, why we're doing it and pushing forward.

What's next for Penn medicine is we are rapidly shifting into population health. In addition to our four sites of delivery, we just bought not hospitals, but more home care companies. We're actively pushing hard into that environment. We're shifting into population health. It hasn't been officially announced, but we're doing a joint venture with a local insurance company around primary care population. I hope in the next couple weeks we announce a specialty cap with a nephrology group.

It is time for Penn, not just to lead in advanced care, but also to lead in population health. David, you started disease management, was one of the first projects you and I worked on. Now, Philadelphia is just catching up where the reimbursement will line-up with that. I'd leave you, Larry, with what I think what's next for Penn medicine is not just treating the patient today, but treating the patient in the future. If you go up to our neuroscience floor, the epilepsy monitoring unit is gathering data from patients 24/7 and they're using that to take care of the patient in front of them.

Simultaneously, we're sending that to the engineering school and the data scientists are going through all that information. Deidentified of course, but going through that information to see if they can detect something in the EG waves or other physiological monitoring, we're also doing biospecimen collections on the floor and matching those together.

We're hoping, but just like we developed cures for certain cancers, we developed the basis for the Pfizer, Moderna vaccine. We're hoping that in the future, the list of things that Penn has been able to impact will increase because again, hear the patient today, but also with an eye on curing or improving people's condition in the future.

[00:21:09] Larry: Kevin Penn medicine has been leading, not just in Philadelphia, but around the country for over 200 years now. With this new building and with what's going on, you certainly have positioned yourselves to continue that lead well into the future. David.

[00:21:27] David: Yes, Kevin, listen, thanks so much for sharing this. I know our listeners are going to be really fascinated. Congratulations, 25 years is a long time to see something come to fruition. What I love about what you're saying is that not only are you now able to see the benefit of that 25 years of planning, but it seems like you're thinking about the next

25 years and thinking about what the future is going to be, and that's exactly what leaders should do. Thanks for sharing time with us today.

[00:22:02] David: Kevin, Thank you very much.

[00:22:21] David: Larry it was really great to have a chance to talk to Kevin. The fact that you served as the chairman of surgery there. I was the chief medical officer. We worked with Kevin, we got to see really how that facility has developed over the years. It's great to see him be able to really talk about what he's been able to accomplish there.

[00:22:45] Larry: As you know we really have seen Kevin's entire career evolve from a mid-level administrator and then really being responsible for the design of the center for advanced medicine, working closely with the administration and then ascending for the CEO role really has been spectacular to watch.

David, you, before anybody really, were talking about managing care, you were doing it at Penn, you had the support of Bill Kelly and others. The innovations at Penn have been going on for a long time, and I think Kevin really has taken it to the next level. To follow in Ralph Mueller's footsteps, not an easy thing to do.

The organization of Penn is not the easiest and Kevin has really grown in the system, worked in the system and I think is absolutely the right person to continue to lead Penn Medicine as they continue to lead in advancements, really in medicine, really across the country and across the world. It was great to talk to him and I think they've done a great job with this building.

[00:23:50] David: Yes, Larry, what I would just add to that is, in thinking about leadership and thinking about leaders, reaching for their moonshots. Sometimes it really does take 25 years. That's what Kevin is talking about. It's really been the consistency of his involvement in that organization to see this through.

Often with leadership changes that happen more frequently, a new leader comes in understandably with different plans, but projects like this that really are well thought out, sometimes take decades to develop, and it's great to see that he not only thinks about that, but he thinks about what the next 25 years are going to be like.

[00:24:35] Larry: I think the big thing about Kevin is he does listen. You asked the question, "Who was involved?" The fact that everybody from floor nurses on up were really involved in the planning is so much different than administrators planning a building and saying, "Here's the building." This really did involve lots of people at lots of levels and they've done it and they've done it very well.

[00:25:00] David: Yes. I was wondering how you felt about it. You of course were a competitor to the University of Pennsylvania, probably didn't have the capital to build a new tower the way that Penn did, do you think that this is going to put even more pressure on other Philadelphia hospitals?

[00:25:22] Larry: Yes, I definitely do. Well, first of all, when I was at temple, I told the people at Temple we're not going to be Penn. Temple serves a role in Philadelphia. Temple really is the safety net hospital in the largest city in the country without a public hospital. You have that role. Obviously Jefferson has had a major expansion, but if you look at what they've done, they have a lot of facilities, they've not really put it all together.

Penn has been very thoughtful and strategic in the growth. Lancaster General, Princeton, the new Penn Medicine at Randnor, they've been very strategic and they've done it in a way

that you now truly have a system. If you look at Jefferson, it's not really a system, it's a lot of component parts, but it's not really a system.

I think Penn, under Kevin's leadership, really has positioned itself extremely well to move into the future. You asked the question, yes, things are moving toward the outpatient setting, but what you're going to see is the complex and more critical type illness on the inpatient side while moving many things to, to the outpatient.

[00:26:33] David: Yes, I think, Larry, you've described it, right. I think Penn has really been disciplined in their approach when you have a lot of money, it doesn't mean you have to spend it on everything. I think that their vision of keeping the care complex on the inpatient side, but also we heard an expansion with home care expansion and population health, different payment reform strategy. It seems like there's comprehensive thinking about where the future's going. I'm glad we got a chance to talk to Kevin today. Thanks, Larry

[00:27:07] Larry: Yes, and you mentioned population health, and I think that is something that Penn could say, "What do we need to do that for we're in, for the complex stuff," but they are looking really at the ground level, primary care, looking at the value-based purchasing. They've made some forays into west Philadelphia in a joint venture with one of the payers, in fact. They're really looking at the whole spectrum of care from primary care on up to the most complex specialties.