

Podcast episode transcript: Travis Bias and Karim Hanna

Travis Bias: Welcome back to Inside Angle. I'm your host, Travis Bias, a family medicine physician and deputy chief medical officer of our health information systems business here at Solventum.

Today, I'm excited to be joined by Dr. Karim Hanna. Karim is a family medicine physician and clinical informaticist practicing in Tampa, Florida. He's the founding program director of a new family medicine residency program at Tampa General Hospital, and we'll get to hear a little bit about that.

He runs the newsletter AI and Med Ed, which has become essential reading for anyone thinking about how artificial intelligence is reshaping medical education. I recently had the privilege of writing a guest post for his newsletter, Humblebrag about AI's role in medical education and his insights on this space are some of the sharpest I've encountered.

Karim, thank you so much for being here.

Karim Hanna: Travis, thanks for having me.

Travis Bias: So for our listeners, many of you are working in clinical documentation, coding of that clinical documentation, population health data, informatics. You're seeing how AI is transforming your workflows daily. And today we're going to explore how these same forces are reshaping how we train the next generation of clinicians of all types and what that means for the entire healthcare ecosystem.

And so starting off, Karim, we discussed a little bit, you and I, how we're moving from a world where attending physicians kind of hold all the knowledge and experience to one where AI is really democratizing access to medical literature and clinical evidence.

For someone who's been both a trainee and now you're one who trains residents, the future family physicians in this country. What's actually changing in the dynamics between those attendings that are training them and the residents or the trainees when a medical student or a resident of any kind of trainee can pull up the latest evidence synthesis in essentially 30 seconds or less?

Karim Hanna: Right, right. they're at their fingertips, they know everything, right? And I guess the verb to know is the question here, because if we step back and think about the philosophy of learning or what does it mean to have knowledge, I think...to have knowledge does not equal to having access to content. We have to be careful with that. Just because I can use ChatGPT or Gemini to tell me how to change my roof doesn't mean you should trust me changing your roof.

And there's an experiential knowledge that the attending physician will bring to rounds, but man, I mean, when a medical student asks me a question and they say, well, I looked this up and I found X, it really puts us on our toes, I think, as the attending. And that that was always the case.

That's part of the reason why I'm in academics, because I think having an academic job keeps me learning constantly. And I try to keep the scope of, you know as you know, family medicine, very broad scope. I try to stay as broad as possible.

But students can challenge us, or learners can challenge us now with having these tools at their fingertips. So does access to data equate knowledge? I don't think so. And just because they have more of it at their fingertips isn't necessarily better. In fact, I worry about it sometimes.

You know, Travis, sometimes I challenge my learners and myself. I try to say, I don't know every single day. And I think, Having this this this front cover of knowledge or like this facade of knowledge, what happens is our trainees are more worried about saying, I don't know, because they have access to be able to look something up.

And when they're able to look it up, you can see really quickly that they know the right answer on paper for the multiple choice question. But then you ask the question like why or how did you come to this you know conclusion? And you see sometimes a gaping hole where that knowledge seemed to be, but it actually is not.

There needs to be some sort of like process and learning that takes friction or discomfort, hard work. And some of these tools make it really easy to access the content, but it doesn't necessarily mean that I know or I don't know.

Travis Bias: Yeah, that's interesting, your framing of knowledge. I almost think of it as like a wisdom where you're kind of applying, there may be the textbook knowledge, but you really have to apply that to the patient in front of you who may have a very different value set or education background.

And think you know I think that's one of those things that attendings with decades of practice experience kind of see how they need to frame things, maybe communicate things a little differently to elicit maybe a different response or maybe motivate a patient in a different way.

And that's something that a chatbot may be able to coach you on a little bit, but they're not able to deliver that in real time, at least as of right now.

And so I think that's a very interesting framing. And you mentioned friction. I had this older attending that we all thought of in residency. We loved him. I mean, we thought of him fondly. He would take smoke breaks throughout the clinic when he was precepting us and come back in and give health advice.

But he had all these nuggets that like, I was like, I want you to give us multiple lectures. Where did you come up with these like practical things that you cannot find?

Karim Hanna: Right. Right.

Travis Bias: In the literature, but would work for you know tens, if not hundreds of patients, things that he had just kind of seen and learned.

And so I think he just had so much context and that amount of context around that single patient's case, you have to feed that to a chat bot to get a relevant answer back. And I think maybe, maybe that's the friction actually that the trainees are having these days is feeding it enough context rather than friction.

Back when I was training was, I got to go to PubMed, I got to go to, you know, up to date was kind of newer at the time got to maybe I'm Googling to look for articles.

And so, yeah, I wonder what your thoughts are around some of these, you know, maybe newer tools that are making it frictionless. But thoughts on that before I move on to that.

Karim Hanna: Yeah, well, your attending had a lot of experiential knowledge.

Travis Bias: Yes.

Karim Hanna: And you in training, you were acquiring experiential knowledge. So that was attractive to you. You saw this like the sage of a physician who had been there, done that and everything.

And I have the same guy. I know exactly who you're talking about, right? Like we have the same guy.

And this was the person that like, you know, rotating with him or her in medical school, you're like, man, I want to be a family doc so I could be like that, you know, or on any rotation. I want to be a surgeon because I want to be like that.

These people who have just had tons of years of experience under their belt. So they do things maybe almost even a little kind of like against the flow of the norm. Like it's like something that stands out and it's attractive to us.

But as learners, we're still trying to figure out what we don't know.

Travis Bias: Mm-hmm.

Karim Hanna: So we are still unconsciously incompetent. I'm sure you're familiar with that grid, right? Like there's still kind of unaware of what I don't know. And that when I'm acquiring or gathering a lot of theoretical knowledge and trying to apply it to the room without intuition or without experience, it can, I think, lead to mishaps, maybe patient dissatisfaction. That's when we see, or maybe misses, you know, just because I know the right answer on paper, doesn't mean it's going to apply to this patient in this particular scenario.

So we just have to be careful.

Travis Bias: Yeah, that intuition comes from just years of experience. And as a trainee, you either you maybe are not listening for the cues the patient's subtly giving you to dig deeper into a problem.

Karim Hanna: Right.

Travis Bias: Or you're trying to you know fix multiple things at once, which may be just too much for a single patient. depend It depends on the case. And I think I've fallen that trap many times in practice.

We were talking about the frictionless, how easy it is now to access all sorts of information, which I think, and hopefully not this doesn't throw us on a tangent, is really going to help expand the scope of primary care.

It actually makes our scope even wider and support a broad scope practice moving forward, especially in underserved areas with underserved populations, which is exciting to me. When you talk about this frictionless access of information, you're talking about tools that I've seen you write about and post about like Glass Health or Open Evidence or Doximity's GPT, or even UpToDate has their new expert AI. And you noted that a lot of these are starting to kind of look and feel similar, the same some of their outputs are.

So from an educator's perspective, what should we actually be teaching our residents about using these tools? And what is ai kind of literacy or fluency mean in practice, in your opinion?

Karim Hanna: I think to answer that last bit, what is what is AI fluency look like? It's the one who's able to leverage AI well. These are all different tools that you're describing.

You know, if I gave you two by four and some nails, and I said, you know, get these nails in with a pencil, you'd look at me funny.

Travis Bias: Mm-hmm.

Karim Hanna: But if I gave you the appropriate tool for the job, like a hammer, you'd say, oh, that's easy, straightforward. So the learner may be leveraging tools, and this could be experienced attending who just is AI naive or a medical learner from scratch, may be familiar with the tools, but not exactly familiar where to apply them best. Just like if you're doing a procedure, you might be using a Kelly forceps for a needle driver.

If you're not using the needle driver, you're going to get less than ideal results. You might still be able to swing. It might take a lot of swings with that pencil to get the nails in, but it's not exactly going to work in the best way. The person who's able to leverage AI appropriately is the competent one.

So to teach residents tools is to teach them first, they need to understand the medical concepts, the path of physiology. They need to have their base from medical school, and that's part of why they go to medical school.

But then they're able to then leverage the tools appropriately. You know, when do I reach for open evidence? When do I reach for you know a more curated study? You know, peer reviewed sort of thing, like up to date as a reference.

Travis Bias: Mm-hmm. Mm-hmm.

Karim Hanna: And when am I leveraging Doximity because I can, you know, fax straight out of their platform to an insurer with a letter, for example, on behalf of a patient. So these are, it's like a whole new set of competencies that that they need to be able to pull from.

And what when they are able to do that? Well, that's when I could say that they are competent.

Travis Bias: Yeah, well, no one was teaching us that in residency. You know, in residency, I was so stressed by the fact that I had to learn actual medicine. I had to learn like coding of that medicine, like the documentation part of it.

I had to learn some of the technology tools. Frontend speech was kind of a newer thing at the time, but there are all sorts of apps that kind of fit together now to support our practice, which is great, which removes some of the burdens that we can actually focus on the medicine piece of it. So to putting all that together and thinking about when do I apply what, that's got to become a core part of education because right now, 15 years out, I'm just kind of winging it by what makes sense to me, right?

Like I go to up an evidence, I look something up. If it kind of reassures me or kind of confirms what I was going to do, I just go for it. If it says something that's a little out of whack, I'll go to up to date then to kind of validate and maybe look it up a little deeper.

Karim Hanna: Yeah.

Travis Bias: But that's me being 15 years out, 16 years out of training. So it's probably different than like a training, someone who's like brand new out of practice and someone who's 30 years out, right?

Karim Hanna: Correct and you jogged my memory for something I wanted to say earlier you're describing why residency is hard why is medical school hard because oftentimes I'm moving to a new place I'm drinking from the fire hose as they say there's a ton of cognitive load. I'm trying to acquire new data and then I'm also trying to acquire clinical skill or you know physical exam. And then I'm trying to interpret the data and then I'm trying to manage with the with all the all of what I just assessed.

And I'm trying to do it all in in stride in a 20 minute encounter. That's really a lofty goal.

Travis Bias: Yes. You're giving me palpitations talking about this.

Karim Hanna: Yeah, it stresses me out too, right? Even just talking about it with our learners, it's a lot for them to handle.

So it's not, you know, a surprise when a day one third year student spends an hour in the room because they're lost. They don't know which way is up. They're trying to think through the checklist of the questions they have to ask about the shoulder pain.

And then they have to come up with the checklist for the physical exam. And by the time they've done that, they've, you know, the whole concept of writing a note is a whole other beast, right? So, so it's all exactly, exactly.

Travis Bias: And then the patient says, oh, by the way, I've had chest pain for the last few days. Can we talk about that? Yeah.

Karim Hanna: So all of these things for you and they come second nature because we've had so many reps, but our learners are still acquiring those reps. So these tools can be fruitful for them if they're able to leverage them well.

Travis Bias: Karim, these are all great points. And I think what we're talking a little bit about is these, it's basically a new wave of AI competencies that are required across medical education from undergraduate to graduate medical education, which ne you know a lot about.

What does that curriculum really look like? And maybe we can put it in the context of the fact that you're starting a new residency program from the ground up, which sounds super exciting. So how are you thinking about integrating AI into your curriculum? What does that look like? What is that AI native residency program really look and feel like? And what are you doing differently than programs that are maybe trying to retrofit AI into a program that's been around for 40 years?

Karim Hanna: Right. So I'll say a couple of things. The first is that our residents and our students are already using AI. So they are already familiar with these tools. I think the actual important thing that program directors or training honestly, any new trainee in any space with leveraging AI is that we have to put guardrails up so that overuse or misuse are cared for.

And if we can take care of that, like poor prompting, for example, that's really low hanging fruit where you can you can poorly prompt open evidence and get two kind of conflicting answers if you if you ask it right or wrong, I guess.

Travis Bias: Mm-hmm. Mm-hmm.

Karim Hanna: If you have like poorly formed prompts, you're gonna get poorly formed answers and that can lead to mishaps in clinical and clinical cases. Continuous process improvement cycles. I think that those are the things that I'm trying to have for our residents and for anyone who's kind of pulling in new competencies in these things.

You've seen the adoption curve of any new technology and oftentimes there are early adopters and some stragglers who kind of wait till the end. But as we introduce these things to the seasoned clinician or the new learner,

They need to be in small bite-sized pieces so that people can acquire a new skill and apply it in their day-to-day and see, oh, wow, ambient scribing actually does help my clinical productivity, or it does actually save me from pajama time.

So I should be using more of these. What is this space called AI? you know and that that opens doors for them. How then do we put this into residency practice? In graduate medical education, there are core competencies that are already in place, like medical knowledge or communication skill.

These sorts of large groups, I think they need to have AI built within the behavioral anchors of the competencies that we're trying to get them to. So if, if you know, medical knowledge competency expresses the importance of being able to develop a differential for an undifferentiated patient, then Can I develop the differential on my own first?

And then can I leverage an AI tool to expand that differential? And that's, we they need to be additive so that it's not removing from my need to function as a clinician or the, to it shouldn't take me away from critical thinking or clinical decision-making.

It should be additive to those skills and make me a better clinician by ways of this new tool. At our program we're able to kind of leverage the large health institution that we're a part of and.

Within the EHR outside of the EHR there are lots of access to different things that are coming down the pipe, so our students our students and our residents have access to a whole lot. But actually within our program because we're a newer program we've kind of said well.

You know, for the first six months of residency, Travis, the attending still has to see every patient. So you probably shouldn't be using an ambient scribe. If there's reason why the ACGME has said, I need to lay eyes on the patient, you probably should be practicing some skill like writing your note.

Travis Bias: Interesting. interesting

Karim Hanna: And some people might disagree and say, no, in five years, they're never going to write a note again. I say, well, you know what? You're right. I don't think they any of us will be writing notes in five years ever again. In fact, I think the EHR as a whole will probably kind of dissolve in the background somehow and everything will just be recorded, you know, audio and or video.

But I think that the residents should be writing the note, not for writing the notes sake, but for the clinical thinking sake of the critical thinking sake, the acquisition of a history, the adding in the physical exam, and then the kind of bringing all those together to come up with something to assess a problem or to come up with a plan to identify a problem.

That sort of linear thinking is often lacking in trainees and writing helps you go through those you know five or six steps every single time, rinse and repeat.

Travis Bias: I love that thought and it just kind of takes me back to it seems like two or three years ago, there was so much hype around these new technologies.

And now we're kind of realizing based on what they could do, we can actually go back to basics in a lot of ways. Like you could actually go back to sitting with your patient, spending some time asking the natural questions, having a pretty natural conversation.

If you have faith, the ambient documentation tool is going to capture most of that.

And then you can take your time to add... or you know, or create this kind of narrative from the beginning and add the critical pieces you think need to be added because the ambient tools have kind of picked up some of these key pieces.

So I think the key clinical nuggets you need for coding, billing, quality measurement, what have you, but then you can kind of go back to basics and do that writing, which is what the doctors did 30 years ago.

Right? Writing in their paper charts.

Karim Hanna: Right, right, right. And you wonder, you know, how do we make sure that the tools keep us patient centered is what you're describing. You know, if we can stay patient centered and focused on outcomes as opposed to, well, you know, things like the quadruple or the quintuple aim, those are important for us as clinicians and for patient outcomes as well.

But keeping the patient at the center of our decision making really should be where it's at, I think. Residents and trainees often get jaded early on because they're overworked and they're exhausted and they're tired for a number of reasons. Like we said, we mentioned earlier, the cognitive load piece, they don't have a whole lot of free space in their head.

So these tools can alleviate, but they need to be just leveraged appropriately, like we keep saying.

Travis Bias: No, I think that's great. The fact that it sounds like you're baking it into the curriculum kind of in a longitudinal fashion, like many things in a family medicine residency need to be, you know, having a concerted effort to explicitly, you know, apply some of these new AI tools and technologies, but then you evaluate how they've done, I think is really, is really, critical. And so is there, well, you know, we focus so much of this effort on trainees. Is there an effort to upskill your attendings as well?

Karim Hanna: Definitely. We try to use things like grand rounds to get to the attendings. And you have the dissenters, the people who say absolutely not, never, ever. But slowly they come around.

And we have a great example of a gentleman in our department who's been around for 25 years, has been there, done that. but just couldn't come around to using ambient scribing. And finally, when and he did, he was so, so thankful. Now he sings it in the hallway. You can hear him coming, singing about his co-pilot.

Travis Bias: Well, and I think that that's an example of a technology. You know, when the EHRs came around 15 to 20 years ago, there were the dissenters and there were the people that were like, before I adopt this, I'm just going to retire.

Karim Hanna: Right. Yeah.

Travis Bias: It was that much of a lift. And I think it's because in many ways, it wasn't obvious what's in it for me. How is it going to help my workday be any easier? How' is it going to help me connect with my patients any easier? And I think with the ambient documentation tools, I mean, it is the power is just incredible to actually remove a burden, save time, let me just connect with the patient in front of me.

And so maybe that's why, like once you finally put it in someone's hands or get them to try it, it's like, okay, it's pretty clear pretty quickly what's in it for me.

Karim Hanna: Yeah, there's fear and apprehension. There's worry that this is going to take my job one day. So without it, I'm in denial maybe a little bit.

But you're right. What's in it for me is always how I take on something new. I'm always thinking, you know selfishly or not, but I'm always thinking, well, how can this make Karim's life easier?

Travis Bias: Yeah.

Karim Hanna: And if it checks some boxes, then yeah, sign me up. I'm in. But there are certain things that AI cannot do or will not do.

And that's important as part of our training too. And we need to keep you know reminding our trainees that there are certain things that they, with their human touch, whatever that looks like, need to need to hold on to those things. And those are important. Those are vital.

Travis Bias: And I think that's one of the reasons to ensure attendings know what these tools are capable of and what they're not, because I think their wisdom is super critical to say, look, I've been there before, and this is what we did. Now, after these solutions, this is what we can do. So there's some power there to augment our work, but there are definitely gaps there. There are still hallucinations and generative AI tools, right?

That are not going to be good in the documentation space. So there are things that I think they, wisdom they can bring to their trainees to identify that what you don't know, know, don't know what you don't know.

Karim Hanna: I was taught big time during training to really value social history and some of the ambient scribe tools will leave out some really pertinent pieces like, you know, I'm going to Thailand next month with my family, or, you know, my dog is sick, like seemingly irrelevant to the clinical case, but really tell you a lot about what's going on and the patient's risk factors and what their world looks like.

Travis Bias: Yeah.

Karim Hanna: And that's what family medicine is so beautiful. I mean, primary care, it gives us that relational kind of longitudinal relationship with our patients. So yeah, I ask about their dog or I ask about their trip to Thailand.

I ask for pictures from the birdwatching tour they did in Ecuador, right? Like these are the sorts of things that make relationship a part of the diagnostic journey as opposed to just snapshots of, you know, data and numbers.

The two are necessary and together they're stronger than each alone.

Travis Bias: That's exactly right. I used to love that social history and putting notes in there and patients would love it when I remembered that trip to Thailand or what have you about their history.

And that's part of the rapport and the connection and why patients build such relationships with their PCPs over time. I mean, the reason I asked about the attendings is because you and I talked a lot about how the best care will ultimately come from teams with the highest AI fluency, not necessarily only those with tons of years of experience. You know, we're thinking a lot about more about what expertise truly means in medicine at this point. And you kind of mentioned knowledge is different than just having access to information.

So as things are shifting in medicine, what do you think stays uniquely human and irreplaceable?

Karim Hanna: We kind of touched on this relationship, the touch, the physical touch of physical exam. You know, patients sometimes will message me after a visit, like saying, Doc, you didn't listen to my heart. Is everything okay? And like, if it was a mental health or behavioral health focused visit, for example, there actually isn't data to say, I need to just listen to your heart arbitrarily. But there's something about touching the patient that there's healing that takes place there. And they look for that. They yearn for that.

And it's even beyond just the physical exam, but the holding hands when your patient is crying, those things, the compassionate piece. I love the word compassion because you might hear it often, but we don't think about it a whole lot.

But it's to co-suffer. You know, it's to empathize with when my patient is struggling with something. When I have compassion on them, I feel their struggle alongside them. They are not suffering with their new cancer diagnosis alone. And that's sort of like in the moment, I have to stop everything and just tune into where, you know, where their heart is coming from at that time in the in the room.

It's a very special thing. It's almost like, you know, my program director told me, Karim, our work is almost like priestly or like it's a holy place. You know, like it's different than the rest of the interactions of the world.

What takes place in the in the room and that encounter is very important that's why we need to be paying attention. I can't be staring at the screen and attuned to my patient's small cues or the tear that starts to well up in their eye. You know, while I'm looking away, they're going to be able to kind of, hold it together. But if I have eye contact with you, I can comment, and say, hey, what's going on? Tell me, what exactly are you dealing with that you haven't volunteered so far?

So those pieces, the humanism and medicine are what are going to, you know, honestly, what keeps me sane. That's a big, big important thing. like I go to work for those moments in those relationships.

But it's also what AI cannot do.

Travis Bias: Well, and it's what patients value and what is rewarding for us as physicians. I think that's the part that we don't want to be typing away on the computer screen and craning our neck to look over at you and say, whoops, I've missed the fact that you were crying. Your eyes are welling up while you're starting to tell me about your ankle sprain.

Karim Hanna: Yeah.

Travis Bias: Like I wasn't expecting that, but OK, it sounds like we're going to have a deeper discussion. Let's go for it. But you can't be clicking away and notice those subtle nonverbal cues or, you know, start having that deeper conversation and directly connect with your patients. And so I love that framing of compassion. I mean, I guess that's the hope, right? With some of these technology tools that are going to alleviate some of the EHR or the computer screen taking our attention away from our patients. And I know you think a lot about that in the clinical informatics world.

A lot of the folks that listen to this are in that, whether it's clinical informatics or in documentation tools, clinical documentation integrity.

So how do you, what is that connection between AI and medical education and AI and clinical documentation? Some of those tools, are we, solving some of the similar problems. We've kind of gone through that a little bit, but are we just solving the same thing just from different angles and it's a win-win-win here?

Karim Hanna: Yeah, I think it's a win-win-win. I think there's, there are tons of benefits. I think it's just a matter of getting our learners to the point where we can say that they're competent and trust them. You know, trust is a combination of things. It's character, you know, so even though I'm really good at doing toenail removals, right? It's a silly example here. You've seen me do 50 toenail removals and you're like, man, Karim can do toenail removal. But if I don't have the character to back it up, you might not trust me. So it's character plus competence, and that's trust. And our learners need to show us that we can trust them in different skills.

And then we can, allow like, I don't want to say allow, permit, but you know, permit their use of the tools as long as they know how to not misuse them, like we said before.

Travis Bias: Well, I think that autonomy is important and what everyone is kind of working towards in their training, right. To get to a point of where my attending trust me to be a little more autonomous, to do some things on my own.

And then gradually by the end of year three, ideally you're ready to go out on your own, right. And practice. I think that's why the residency model, this apprenticeship model works so well and has for many years. So

Karim Hanna: Correct. And you might not acquire everything during the three years, but having the mindset of learning allows you, even when you're 15 years out, to acquire a new tool. So that's an important, that growth-minded kind of approach to post-training, what that looks like.

Travis Bias: Yeah, I think that's it I mean, I remember some attending was telling me, you know, you're not going to learn everything, but you need to at least know, need to know where to look it up. What are the reputable sources? And now more than ever, right? You know how to validate the information that's being put in front of you by a chat bot. Despite the fact that maybe citing the exact paper, there's still some things that can be thrown in in those responses that I'm like, really?

So, all right, lightning round to finish up.

Karim Hanna: Sure.

Travis Bias: Your favorite AI tool for clinical use What is it and why?

Karim Hanna: I'll tell you a tool that I'm using a lot more. It's not necessarily directly clinical, but I'm loving consensus. And consensus does systematic reviews in seconds, which is wild.

Travis Bias: Wow.

Karim Hanna: I mean, it'll review 50 papers and tell you exactly how it broke down the 50 papers, the selection of them on your on your clinical question. And you can see how it brought those things together, what commonalities the papers have. What you know are the differences? It just does a fantastic job in seconds.

And if I can add a piece to your question, you know what is the AI tool that I'm still hoping for? My current favorite is ConsenSys. I think the tool I'm still hoping for is like better population health type tools, like leveraging data visualization straight from the EHR to like, you know this is Karim, this is your patient panel, and this is what it looks like.

The patients, the 1,200 patients that are assigned to you, Karim, this is how they're doing. This is how you're utilizing things versus your patrons, right? I think we're not quite there yet. It's not easy. There are, yes, we can pull data, we can export it into a big CSV and then throw it into Power BI and make something happen. But it's not easy yet.

And I'm still kind of hoping for that.

Travis Bias: I love that thought because I always just was shocked. Like for this one patient with this payer, what is the cheapest place where I can send this medication? Or what is the cheapest place I can get this imaging study? And I never had that at the point of care.

I was blown away by in 2025 I still can't have that maybe directly in front of me. And I mean, maybe there's some other tools out there, in larger systems that I haven't seen, but, painful.

Karim Hanna: Well, no, I don't think there are tools. It's not in favor of the system, right? Like it's like the system benefits from expenditures being higher.

Travis Bias: Sure.

Karim Hanna: So, so then those things are going to be really hard to roll out. Obviously we, but We take care of people who don't have the means for the GLP-1, right? So how can you best suit this patient to control their diabetes or assist with their weight loss from a financially responsible way?

It's not a crazy idea. Things like GoodRx have come out with the intention. Yeah, and it's been super helpful. But it's slow and it's extra clicks. And it's outside of my EHR. And, and, and, and, and...You have to remember to use it.

Travis Bias: And you still need that pop health the overall pop health view. I get where you're going with that.

Karim Hanna: Correct.

Travis Bias: Okay, this is supposed to be lightning round. My fault. Sorry. One thing medical educators are getting wrong about AI right now.

Karim Hanna: I think over reliance, like we talked about, they come in with fear and excitement, but they are not checking their students or their learners for the why behind the answer that they give.

Travis Bias: Fair. right, hot take. What aspect of medical training will not be disrupted by AI?

Karim Hanna: The hugs, the tears, the helping patients get their socks on, and the walking them out to their car, the celebrating the new pregnancy, those are the things that are not going to be taken.

Travis Bias: I just got chills with that. I love that. If you could mandate one AI competency for every graduating resident starting tomorrow, what would it be?

Karim Hanna: Like we said, prompt engineering. Just learn how to write a thorough prompt, understanding that a three-page prompt will get you a really good answer, and a four-word prompt will get you kind of a crummy answer.

Travis Bias: That's a good one. We've talked about how without guidance from medical education leaders and accrediting bodies, we risk an uneven, perhaps chaotic application of AI that gives rise to widening inequities.

So what's your biggest concern if we get this wrong? And conversely, what's the most exciting possibility if we get this right?

Karim Hanna: Most exciting first, we could get really good at diagnosing we can get really good at screening. I mean, like if you think about the implications of mass screening you know with leveraging AI, who is at risk for what and why, and can I catch something way before?

Can my models predict better, my clinical decision support models? Like you know one we use often is you know the CURB-65, which is like, do I send this pneumonia to the hospital or not? Or do I admit them or not?

Travis Bias: Yep.

Karim Hanna: And the question is always there. And these are old tools and they're not specific to my patient at all. Like they have four or five pieces in the calculator, but they're not really tailored to the one person who's sitting in front of me now.

These tools should get a whole lot better. We should be building machine learning models with much better curves to hit the data points along the graph. And we should be doing a much better job. What goes wrong, what's the biggest concern is, you know, misses, overcompensating or bias coming into to the picture and us not doing best by our patients.

And these are things that we worry about, but maybe they're subdued because of our bias of like, you know, it's coming from a machine, so it must be right. We just have to really be careful. If we as clinicians are not sitting at the table, then folks creating these things that are being sold to our health system or sold to the EHR, whatever these third parties are, not that they have malintent, but they you know they might not have the patient as the primary goal.

And that's we have to kind of really be advocates for our patients on that front.

Travis Bias: Yeah, thinking about retooling the CURB-65 or other prediction scores like that, that's really the core of what we think about is anticipating, you know, what kind of resources will be

required to care for this one patient and this one admission, for example, or maybe to care for this single person throughout the year.

And I think, yeah, the better we get better with the predictive tools and technology, the better then systems can be properly incentivized to care for them appropriately.

So before we finish up, I heard you're launching your own podcast. Tell me a little bit about that and any feedback after this would be good.

Karim Hanna: Sure. Yeah, in theory, I want to start a podcast. I think I've put some pieces together. It hasn't come off the ground yet. It's much easier for me to write than to throw together a conversation like this. So kudos to you guys for doing this.

But my hope is to take clinical decision making and apply it to real world problems outside of the clinic. The way we acquire a history, the way we get some objective data and the physical exam or or lab findings, and the way we apply kind of evidence-based practice, what does the data say, and we come up with a differential.

I want to take that thought process and apply it to things that people run into in everyday life. And you know, hopefully I could find the time to do something like this in the future. Currently studying for an exam. So that's taken taking the bulk of my focus recently. And I've got three young kids, so it's a party at the house all the time.

But probably sometime in the near future, if you wish me luck, maybe I'll get it off the ground.

Travis Bias: Awesome. I think that's a great approach and a great problem, I guess, a great solution that people want to hear a little bit about. My first job at I was in a clinical operations consulting role. And I thought it was so fun because instead of just diagnosing individual patients, I was basically helping to diagnose organizations or service lines.

And so it really was a very similar approach to like gathering information, you know, organizing, prioritizing, and then presenting that back, getting feedback, and then making final decisions on what interventions to pursue.

Karim Hanna: That's it. Exactly. So hopefully it's useful for folks.

Travis Bias: Oh, fantastic. So final question, you're building this residency program just started this year. Is that right?

Karim Hanna: Yes, our first intern class started in July of 25.

And we're currently recruiting for, at least at the time of recording this, currently recruiting for our second class. And we're in Tampa, Florida. So it's easy to recruit to kind of the Sunshine State, close to the water, at the hospitals on the water, which is which is lovely.

But it's been a journey kind of getting this off the ground. And it's been a lot of fun building.

Travis Bias: What a time to enter training. I just, I cannot imagine. It went so far from when I entered almost 17, 18 years ago.

So you're building this program, you're writing this widely read newsletter and blog, practicing clinically, launching a podcast. Clearly you're thinking about how medical education needs to evolve for the future to meet the demands of our population for the future.

So what gives you hope and about where all this is headed?

Karim Hanna: That's a hard question. I think the hope is that people still care for others and we still have to love our patients. And when I when I see a student or a learner expressing that care, you know, beyond the norm, that gives me hope. It gets me really excited when I see a resident making an extra effort to go back to the patient's room, for example, after rounds to get them a cup of water while they're while we're on rounds.

Those sorts of little things, that's what gives me hope. If we can do small things with love, we can make big changes in the world. And that's kind of paraphrasing what Mother Teresa said. So I'm a big fan of that quote.

Travis Bias: Awesome. I think that's a great thought to conclude on. So Karim, where can people follow your work?

Karim Hanna: [KarimHannahMD.com](https://www.karimhannahmd.com). You can find everything there. A little bit about me, how to reach out to me if you need me, and a link to my blog. It's a sub stack from that website you'll find me.

Travis Bias: Perfect. Thank you so much for doing this. Thank you for your time and your leadership in this space. And to our listeners, thank you for tuning in. We'll see you next time.