Primary Care Cures
Episode 108: Dr. Arup Roy-Burman

Ron Barshop:
You know most problems in health care are fixed already. Primary care is already cured on the fringes, reversing burnout, physician shortages, bad business models, forced buyouts, factory medicine, high deductible insurance squeezes the docs and is totally inaccessible to most of the employees. The big squeeze is always on for docs. It's the acceleration of cost, deceleration of reimbursements. I want you to meet those in this show that are making a difference. With us, Ron Barshop, CEO of Beacon Clinics, that's me.

Ron Barshop:

All right. There are four tipping points that are going to hardwire change in healthcare finance this presidency, whether we want it or not. Remember that HHS, Health and Human Services, controls the largest part of the federal budget. It's $100 billion a month, and it grows every day because we have 10,000 Medicare enrollees daily for eight more years. Number two, the US owes $27 trillion dollars, and the annual deficits usually are about a trillion a year, but now they're three trillion because of the pandemic, and maybe even more.

Ron Barshop:

So we have this banana republic financing, that's forcing a bigger piece of the federal pie towards interest payments. It's already a top three spend, and it's going to jump to the number two spend in our federal pie. It can only go up. Interest is historically low. It's got to go up. Number three, 48% of every federal dollar directly or indirectly is spent on healthcare, according to a Johns Hopkins study. Marty Makary led that study. You've heard him before. It's adding things like interest on the debt that goes towards healthcare deficits. It's things like social security enrollees' portion of their social security check that goes to healthcare. So it's a large swath of our economy, and it's only growing, and it can't go lower.

Ron Barshop:

Number four, Medicare and Medicaid are essentially broke in the next four years. And number five, over half all workers make under $13.80 an hour, says the Social Security Administration last month. Most of these people in our hourly economy do not have the scratch to make these deductibles, these co-insurance payments, these copays, much less the premiums. So they're functionally uninsured. Most of our country is functionally uninsured, even though they may have health insurance with their employer. So healthcare appears to most Americans to be a treehouse for the rich, with no ladder.

Ron Barshop:

So let me segue this to our guests, if that's possible, because he gets all this, and he sees and delivers on a promise to deliver consistent care on a daily basis. Dr. Arup Roy-Burman is a pediatric physician and an Associate Clinical Professor of Pediatrics at UCSF. Arup is the founder and CEO of Elemeno Health, a mobile platform that helps healthcare organizations

engage frontline staff to deliver consistent best practices, and to bring quality, safety, and efficiency to the point of care. Welcome Arup to the show.

Dr. Arup Roy-Burman:

Hey, great to be here.

Ron Barshop:

I'm just fascinated by your journey of what led you to dealing with quality and consistency, and I think hearing your story would be a good way to start that discussion.

Dr. Arup Roy-Burman:

Sure. Quality and safety and healthcare in general, it's a team sport. Healthcare has become increasingly complex over time, and the results of that have been people living longer, and more fruitful and productive lives. But as you've noted, it comes at a cost. Costs in the sense financially, and a cost in the time and effort of people to make it happen. And in this environment where we're relying more and more heavily on teams, it's not just one person that makes the difference. And I found in my career span 20 years, that's been in critical care, a lot of big name institutions with very well known high quality outcomes.

Dr. Arup Roy-Burman:

But in each of these institutions, I've sadly seen patients die from preventable mistakes, mistakes made by well-intentioned, hardworking, well-educated staff who simply could not pull the information they needed when they needed it. And I used to sit on a lot of RCA committees, it's about the root cause analysis, looking at serious harm, or potential harm events, and breaking it down to, where were the failures? And I'd say 90 plus percent of the time, we determined, "Yeah, we knew this already as an organization, but our front lines had forgotten this. And now reactively, we'd go and try to train them up." And so we said there's got to be a better way to be able to close that gap between what we know as an organization institution, and what we actually practice at the bedside.

Dr. Arup Roy-Burman:

And we asked the question of, why is it that in the consumer space, technology, the only way that it survives and thrives, is if it makes our lives better in some way, it enables us as a user or empowers us. It makes us happy. It makes our life more simple. If it doesn't do that, it doesn't survive. And why is it that when we look at healthcare, whereas you pointed out, the stakes are incredibly high, higher than in any other industry, why is it in healthcare that is the most dependent upon information, that we have the most backward information technology? And the greatest manifestation of technology in the healthcare space has been the electronic healthcare record. And we've all seen this firsthand, whether as staff or as patients, that what we've done is created the most expensive clerical workforce in the history of the planet.

Dr. Arup Roy-Burman:

You see, there was a study not too long ago in internal medicine, where they looked at the internal medicine residents and found that they were spending two hours of time on electronic work for every one hour of face-to-face patient time. And that's no way that those of us who

deliver healthcare wants to spend our careers. That's why we're frustrated and we're burning out. So why can't we bring the conveniences of consumer technology to the healthcare space, and work to enable, equip our frontlines to succeed, so they can get the information they need in the moment, and in a way that they can digest in the moment. So that's what we sought to achieve with Elemeno.

Ron Barshop:

I have a million questions for you, but I think you can answer about 800,000 of them with this question. Your technology platform, basically is an app that is delivered to either to [inaudible 00:06:37] or nurses, or actually the doctors themselves, to answer questions with short videos, to give them the most current information out there. Is that about the sum of it?

Dr. Arup Roy-Burman:

Yeah. We're about on demand, training and communication for the point of care. We convert your content into what we call micro learning, bite sized nuggets. That may be video, it could be a series of pictures. It could be an interactive decision guide, or little bite-sized text. Information that you can consume in the moment when you need it.

Ron Barshop:

So if you need to know the most current way to a lance a boil, or if you... More recently, we know that peanuts are really important to introduce early in a baby's life. Whereas pediatricians have been told for decades, don't give them peanuts, they'll choke on it. But we now know through Israel, that peanut introduction is a great idea from the earliest age possible, so they don't develop an intolerance or even an allergy. So is it stuff like that, that's on your bite-size videos, or pictures, or is it...

Dr. Arup Roy-Burman:

We are a combination of content like that, which may be generic and applicable to everybody, but more specifically, also having content that is tailored to your house, to your needs. So we're a team based application. So if somebody has Elemeno in their hospital, it will be for Hospital A, their labeled site. And then Hospital B has another one, Hospital C has another one. So for the end user, what they see is content that has been approved or curated by a subject matter expert in their institution, meaning like a department manager or department medical director.

Ron Barshop:

So you're always adding to the body of work, always-

Dr. Arup Roy-Burman:

You're always adding to the body of work, and that body of work in your institution is all vetted for your institution. So you don't have to worry about staff doing things in a way that... It may work in Hospital Z, but for your patient population or the devices and equipment that you have, doesn't work so well in Hospital H. So again, it's curated for your site with selected content shared between sites after their approval.

Ron Barshop:

So [inaudible 00:08:58] say it takes 17 years to get something from best practice that we know of in the gold standard of care to the bedside or the clinic. You guys can condense that down to days.

Dr. Arup Roy-Burman:

Absolutely. And where we've seen that best is in COVID. So, in COVID we saw when the pandemic began, information was moving so quickly that what you did last month is different than what you did last week, than what you did yesterday, and sometimes even over the course of a day, a hospital was changing information as to, "Oh, triage the patients to here, to there, use this swab, use that swab, or we're out of PPE, use this instead." And the way that they had historically disseminated this information was through email, which you know how on top of everyone is with their email, or through binders and flyers, which immediately get outdated, or through your weekly or monthly staff meetings, which can't move fast enough. And frankly, in the era of COVID, it's not even safe to get all these people together anyways.

Dr. Arup Roy-Burman:

And so that's where we had one of our lead clients, UCSF, they said, "Look, this is the way we need to go to be able to stay on top of COVID in the ED. And this became their platform standard for where the communication was happening for the team on what's the latest and greatest, and what they need to be doing. And then they took it from there, where some other affiliate institutions said, "Hey, we need help." So they signed up for Elemeno as well, and were able to share practices from the other hospitals, and then add on their own to their own site as well.

Ron Barshop:

Staff meetings are notoriously weak on information dissemination, which is their whole purpose, because 80% of what you hear you forget within a few hours, and 10%, you forget 24 hours later, where what you do remember of the 20% is inaccurate the next day.

Dr. Arup Roy-Burman:

Exactly, exactly. And it's about context. If we look at the staff meeting, that's traditional didactic or pedagogic teaching. Like you teach to children, you sit in a classroom and you tell them a bunch of stuff. But we know that as adults, the way that we learn, adult learning is about context. It's about in the moment, it's about nice and short. That's why solutions like YouTube have thrived, because you can get what you want when you need it, and that's the way that we retain. So it's not just about training, it's about sustaining.

Ron Barshop:

So like the most information that goes to frontline staff, which is pushed information, this is pull. So I now know that peanut allergies or something I want to study, I click on that video or that piece or that picture, and it gives me what I need to know about peanut allergies for pediatric patients right there on the spot. But I asked for it, I pulled it.

Dr. Arup Roy-Burman:

Yeah. Yes, there's a pull, but there's a push piece as well. So let's just say that I run the allergy clinic, and we've got a new way now that we are going to be handling our peanut allergy patients. And there's, for this example, this is our new desensitization procedure. So that procedure, as a manager, you can also assign that to all of your staff. And then you can see on the backend, "Oh, I've got 15 staff. Here's my 14 who have engaged, and who viewed it. Here's my one who has not. So now I know not only when I've tried to disseminate that, I know how effective it is in getting out to people."

Dr. Arup Roy-Burman:

And then not only do you measure that quantitatively, but from a qualitative end, the end user has the opportunity to give feedback about, "Hey, Ron, that was great." Or, "That was 'meh', and this is what could make it better, because hey, there's a better way to do this." Or, "I disagree with this point." Or that, "I don't understand this piece." That type of information collected in the app and brought back to the approving subject matter expert so that they can see this. They're now listening to the users, hearing their questions, and then iterating their content to be able to best address the needs of the frontline users.

Ron Barshop:

I see. So what is the pushback you're getting from potential customers when they say this is not something we want or need right now? Because they've got plenty of money. The hospitals, my God, they're awash in money right now.

Dr. Arup Roy-Burman:

On one hand, you would think they'd be awash in money. On the other hand, they'll use the argument that their revenues are down with COVID, that all of their elective procedures have been canceled. And so in that way, cash flow is a problem. But the most common pushback that we get, I'd say there's two pieces out there. One of it is, "Hey, is this one more thing, because my staff are so overloaded. I don't want to give them another piece of technology to deal with." That's one. And for which we say, "We're actually a solution that was developed by frontline staff. And as in the example I just shared with you, we're about a new power model. One where it's not only a passive consumption of content, but frontline staff are actively involved in curating in rating and helping to produce content." That is a lot more of a win for staff and why they want to use it.

Dr. Arup Roy-Burman:

So that's one of the items that we get. And the other thing that we get, is from people who are so high up, and that they've distanced themselves from the front lines, and they've been doing this for so long that it's like, "You know what? I got this, I'm used to my traditional ways of doing that. I do the in-person teaching. I've got my learning management system that I use for cybersecurity and sexual harassment training, and I'm just going to use that for all of my other teaching." There's this kind of reticence to change. "I'm far along in my career. Why should I do anything different?" So I think those are our two most common barriers.

Ron Barshop:

So Elemeno Health has a customized product for large systems, but for the smaller physician groups, do you just have a standard plain vanilla product that you can offer them?

Dr. Arup Roy-Burman:

That is one that is on the horizon, and not too far out, actually. There is a major top five medical center in the country that does a lot of work in primary care. And they have worked with us to take their primary care content, which they are constantly updating, and take that not only for delivery for their own network, but also for other networks. And so what we're doing first with them is deploying that into some federally qualified health centers. So basically, helping to scale knowledge from a resource rich institution, to smaller resource constrained institutions. And as that progresses, the model on that is to be able to take that, and then scale that content more broadly across primary care practices.

Ron Barshop:

So what are your hopes and dreams for this company three years from now? What does it look like? Is it fundamentally the same? Is it going to radically change? Is your customer base going to change?

Dr. Arup Roy-Burman:

Yeah. We've deployed in the inpatient setting, which is the bulk of our clients. We've also deployed in outpatient, and extended out even to the social determinants of health, Alameda County. We've got a fabulous contract right now. We've been working for a few years in helping to connect all the different social services agencies. Your substance abuse, your home services, behavioral medicine, all of these different agencies connecting their resources to the field worker in the community, so that they can better connect the homeless population, and support the homeless population. So that's an example outside of the traditional healthcare that we've done.

Dr. Arup Roy-Burman:

We've expanded in our inpatient clients. We started with nurses and doctors and RTs, but now we've got environmental services on board, hospitality on board, because everybody is struggling with this same issue of closing that gap between what they know as an organization and what they actually practice. And then we've also deployed in post-acute care and have a growing presence in hospice and skilled nursing. So what we see, is in three to five years, is really a robust deployment across the continuum of care, so that the best practices that you have in the big house of the hospital can be scaled upstream to outpatient medicine, and can be scaled downstream into post-acute care.

Dr. Arup Roy-Burman:

So for the patient, they get that same high quality care regardless of where they physically are. That the knowledge from the most resource rich institution is shared across the continuum. That's one way that we look to kind of democratize care within here in the US. And the other place that I would really like to see, is that we are on the cloud and all content that our clients make, they can keep it in their own house if they want, but if they're willing to share it, then they share it, and others can take that, and they can approve it for their institution, or they can create their own derivative.

Dr. Arup Roy-Burman:

This becomes a big play when we look at the globe, in that much of the world, the most complex piece of technology that a healthcare provider has access to is simply their cell phone. And so through the cloud, we could take practices from those that are resource rich, and democratize that to those that are resource constrained. And we see this as a way that we can democratize best practices, not only across the US, but across the world. And if we do that, we can enable every healthcare professional to deliver the best care possible to every life they touch.

Ron Barshop:

So what do you say when a hospital administrator says, "Hey, we love the platform. We're going to use it. In addition to changing how we give the best care at the point of care, we also want to upgrade how we're training on our EHR, because we can upcode here, and we can add this language and get a better reimbursement over here." Are they slipping in to the coding and the billing issues with the doctors trainings?

Dr. Arup Roy-Burman:

Some of that has come up, yes. More broadly, what we've had is clients say, "Hey, through Elemeno, I can do some at the elbow support for my EHR, and I can do that virtually, because my EHR is constantly changing, and it costs me a lot of money to send the trainers around to be able to engage all the different staff, especially when it's a change that isn't happening all the time. It's a practice that maybe you're hitting every few days or few weeks. How do I teach people on that?" And so they've said, "You know what? Let me put that short tutorial in Elemeno, so people can pull it when they need it." And they've done that for record keeping purposes. And they've done that in purposes to also to help with trying to be most accurate with billing and coding.

Ron Barshop:

Well, if people want to reach you, Arup, how do they find you?

Dr. Arup Roy-Burman:

If they want to find me? I'd say first, it depends on who I guess is looking for me. People can reach out to me on LinkedIn, on a individual professional basis. If wanting to know more about the company and our product, I would steer them to our website, and there they can reach out to our team at info@elemenohealth.com, that's E-L-E-M-E-N-O health.com. And if there's a specific request through there to speak with me on the info line, they can address it to me or request for me, and I can get back to them from there.

Ron Barshop:

Okay. And I love to stump all my guests with a question at the end. If you can fly a banner overhead with one message to all Americans, what would that be? See, it's a stumper. I always get these long pauses when I ask this one.

Dr. Arup Roy-Burman:

There's a lot of great things that you can say. I'd say support our frontline heroes. And by that support... We're in a battle right now. We're in a battle for healthcare, a battle for healthcare around COVID, and we're in battle for the future of our economy. Everybody wants good healthcare. We have the political arguments about who's going to pay for it. But if we want that good healthcare, we've got to support and enable those people who deliver it. And no time more than now are we seeing how much those heroes are really worth.

Ron Barshop:

You know how that could translate, rather than banging your pots when they're coming home, is to actually maybe, when you see somebody in scrubs is just tell them something nice like, "Thank you for serving me. Thank you for what you're doing for our country. Thank you for what you're doing for patients."

Dr. Arup Roy-Burman:

Absolutely. Think about how did the term nursing come to be, right? It came from the mother nursing the infant, right? It's about touch, it's about health care, it's about caring for one another. The fuel that brings our healthcare providers to work day in and day out is gratitude. It's when the patient says thanks when you make a difference. So if you can let them know they're doing that in any way, and if you can do that in an active way, to make it easier for them to help others, that means more than anything.

Ron Barshop:

Great. Well thank you for being on the show, and we will contact you again in a few years to follow up and see how this dream is fulfilling. Thank you for your time.

Dr. Arup Roy-Burman:

Sounds good. Take care.

Ron Barshop:

Thank you for listening. You want to shake things up? There's two things you can do for us. One, go to primarycarecures.com for show notes and links to our guests. And number two, help us spotlight what's working in primary care by listening on iTunes or wherever you get your podcast and subscribing and leave us a review. It helps our megaphone more than you know. Until next episode.