What if Every Child Got Screened? Transcript

[00:00:00]

Introduction and Welcome

Ertenisa Hamilton: You really need to identify what are the underlying factors for what you see as adults.

Rachel Vreeman: I think it also creates this connection that we really are giving families what they need, and, and i- in many ways helping with, you know, they ... Everyone cares about their children the most. Yeah. Is

Ertenisa Hamilton: there any

Leslie Schlachter: cost to the families for this?

No.

Ertenisa Hamilton: No cost to the family. It is all being taken care of by the government.

Rachel Vreeman: Passing

Ertenisa Hamilton: out, right?

Leslie Schlachter: Hello, and welcome back to The Vitals, the Mount Sinai Health System's groundbreaking roundtable video podcast. I'm your host, Leslie Schlachter, a neurosurgery physician assistant here at the Mount Sinai Hospital. Today we're talking about a global perspective on child and adolescent health, and how one country is transforming care for young people at a national scale.

In Guyana, nearly 40% of the population is under the age of 18. Until recently, many children did [00:01:00] not have access to routine health checkups beyond early childhood vaccines, but that's changing. The government of Guyana, with technical expertise from Mount Sinai, has adopted a nationwide school health screening program that's reaching children where they are: in the schools.

The program is not only improving individual health outcomes, it's generating data that informs national policy and helps build a modern, high quality health system of the future. To talk more about this important work, we're joined by Dr. Rachel Vreman and Dr. Ertinisa Hamilton. Welcome.

Mount Sinai's Global Partnership

Leslie Schlachter: Okay, so to kick us off, can you just tell me and our listeners, how did Mount Sinai Health System get involved in this, in this project?

Rachel Vreeman: Well, in Mount Sinai's Global Health department, we really specialize in health system strengthening, and we had this incredible opportunity where we were invited by the Ministry of Health in Guyana and the government of Guyana to partner with them [00:02:00] in their efforts to grow Guyana's health system across the country on lots of different levels.

And so since 2022, we have been a partner in Guyana along those lines.

Leslie Schlachter: So not only do we at Mount Sinai Health System do this for ourselves, we offer these services to help others as well.

Rachel Vreeman: We do. In, in our global partnerships, most often we're partnering with other academic institutions, their public health systems, and then often with their government partner in those systems, the Ministry of Health, or sometimes it's called something like the Ghana Health Service in Ghana.

But in, in Guyana, it's a particularly unique relationship in that we have this long-term consultancy established with the Ministry of Health, and we get to work r-right next to them in doing this health system strengthening effort.

Leslie Schlachter: So what were the initial... And maybe it's evolved. What were the, like what are the objectives, the main objectives of this partnership?

Rachel Vreeman: The objectives are big ones. [00:03:00] Together, we are aiming to transform Guyana's entire national health system. When we look towards 2030, we are committed together that Guyana would have a world-class public health system that serves every single person. And our efforts in that together range from working on hospital quality and improving the quality of the national hospitals, the hospitals in each region.

We work on primary care efforts and, and efforts that are growing from, you know, the smallest community level all the way up through what's needed at the referral hospitals for what's needed. As well as efforts in digital health, in workforce development, and training and education, um, and partnering with the government to make plans and then put those plans into place for what's needed for the next hospitals, the next health workforce, all the stuff that is needed to really transform the system.

Leslie Schlachter: [00:04:00] That's pretty deep. So let's... That sounds like a lot. I wasn't expecting that much. So let's just like take a step back for a second.

Career Paths in Global Health

Leslie Schlachter: Um, when you guys went to medical school, you, were you thinking this was something you wanted to do, or you fell into it? Kind of just like let's tell our listeners what both of you guys do on a day-to-day outside of Guyana and how you ended up in this role.

Ertenisa Hamilton: I am the director of primary healthcare at the Ministry of Health in Guyana, and I manage all of the programs that looks at health across the life course. So I manage nine sub-programs Maternal and child health, adolescent health, men's health, women's health, elderly health, dental health services, environmental health, s- the school health program, and there is also health promotion and a nutrition program.

So all of the programs that looks at health across the life course falls under my supervision. So on a normal day, [00:05:00] I will be looking at policies and strategies and monitoring how it is that we're implementing new programs. So that is what my day looks like.

Leslie Schlachter: Wow. And how did you end up on this path?

Ertenisa Hamilton: So initially, I was working in the hospital as a junior medical doctor.

Leslie Schlachter: Here at Mount Sinai?

Ertenisa Hamilton: No, in Guyana.

Leslie Schlachter: Okay.

Ertenisa Hamilton: At our national referral hospital, I was working in ICU and anesthesia.

Leslie Schlachter: Mm-hmm.

Ertenisa Hamilton: As a junior doctor Between deciding what it is that I wanted to do, and we had a situation in which the primary healthcare was growing rapidly, and adolescent health was a program that they were introducing.

Mm-hmm. And they sent out word to all of the doctors to see who would have been interested. I took up the opportunity, and because I wanted to try something different before really committing to a career, and I never left. [00:06:00] Wow. So I moved from adolescent health to being the officer with responsibility for maternal and child health services, and then eventually becoming the director of primary healthcare services at the Ministry of Health.

Rachel Vreeman: Wow.

Leslie Schlachter: And what about you? What was your path?

Rachel Vreeman: I was someone who never knew exactly what I wanted to do, and I feel like I got lucky enough to find my way to the perfect job for me. Um, I, I was an English literature major, eventually decided to go to medical school. In medical school I wasn't sure, but then decided I- what I wanted to do specifically, and then decided on pediatrics.

And, uh, in my course through pediatrics, I started to realize that I really loved working on bigger challenges for how we were providing care for families, and how to make that better, how to not only think about the family that I was working with, but also to find ways to, you know, fix our clinic system or have a model of care that [00:07:00] would serve a certain group.

Um, and then I, so I, I went into a research fellowship, a health services research fellowship after I finished my residency program, and had the experience of working in a partnership in Kenya, um, with the medical school there and their national hospital system and the medical school that I was working at at the time, Indiana University School of Medicine.

And it happened, this was in the early 2000s, and HIV was a massive problem in Kenya, as it was in many places at that time. But our wards in the hospital

were full of kids dying, and we didn't ha- at the adult wards, too. And at that point, the medicines to treat HIV were not available in Kenya.

Leslie Schlachter: Mm-hmm.

Rachel Vreeman: We were lucky enough to receive one of the first awards from USAID, from the US government, to this partnership in Kenya to be able to start to provide HIV care and HIV medicines in the country.

[00:08:00] And even though I was really junior, kind of a baby pediatrician- Mm-hmm ... um, I happened to be the only pediatrician, along with one Kenyan pediatrician, and we were sort of pulled in to figure out how to grow this HIV care system that would also take care of the babies and children and, and, um, the pediatric side of things.

And so that led To then, um, you know, this was now more than 20 years ago, but to partnering with the Ministry of Health in Kenya, with the Kenyan, uh, physicians and the hospital system to grow up an HIV care system over 400 clinical sites in Kenya. And that, and well, I, I increasingly specialized in taking care of kids with HIV, but it also really taught me a lot about how to grow public health systems and how to partner in ways to, you know, think of everything from the medications that are needed- Right

to the clinical protocols that [00:09:00] people need to follow, to working with partners across the public and academic system to, you know, train up the health workforce that was needed. And i- in primary care too, how to eventually not only have this system that took care of people living with HIV, but that could also be expanded to provide care for other diseases, that d- ultimately provide primary care services and preventive services as well.

So I then got to take that experience and continue to grow that in other partnerships, including then coming to Mount Sinai, where I get to lead our Global Health Department and the Global Health Institute and where we now have the opportunity to do this across the country of Guyana with the Ministry of Health- Yeah

and partners like Dr. Hamilton.

Leslie Schlachter: That's amazing. So what were... When you guys started this in 2022- Mm-hmm ... what was, like, the first couple initiatives? 'Cause I imagine this is a big project, so what were the first couple things on your to-do list?

Rachel Vreeman: Well, on our Mount Sinai side, some of the initiatives [00:10:00] were really focused around hospital care and the specific, um, quality of services that were provided at the national hospital.

But then on the broader public health side, we actually were able to start partnering with Dr. Hamilton and her teams from the beginning- Mm ... um, around an initiative to think about child and youth health, which I'll let her describe- Right ... in, in that. But also working on digital health and on health workforce analysis and, and development, and that's continued to, to grow from there.

Leslie Schlachter: Yeah, 'cause one of the things that I'm hearing is that you guys started to begin a school age program, like a health screening, and I heard you use a term I'd never heard before. You said it's a life course. There's like... Is that what you said?

Ertenisa Hamilton: Yes, I did.

Leslie Schlachter: Yeah. So this, I guess school age children would be like, I don't know, stage two or three 'cause they're not infants anymore?

Ertenisa Hamilton: Mm-hmm. Correct.

School Health Screening Program

Ertenisa Hamilton: So what does that look like? So for within our system, the way we have structured healthcare, there is a very [00:11:00] good maternal and child health program, and that spills into the early develop- childhood development program. And so a child goes to what we consider to be a well-child clinic until the child is five.

Okay. And then they would have been in the school system, and then they continue. So There were programs that comes after, um, the Well Child Clinic, but none of it would've been really for the young child, which we consider to be from age five to 10.

Rachel Vreeman: Okay.

Ertenisa Hamilton: Um, and so programs were there structured that didn't really look at offering the services on a continuous basis for these children.

And so now with the partnership with Mount Sinai, we have had the opportunity to include all of the age groups that were missing from having routine care.

Leslie Schlachter: Mm-hmm.

Ertenisa Hamilton: Which would be the child who is in the early stages, um, the young child, [00:12:00] and the adolescent. And so the program for screening took on three basic, um, three basics target groups.

So we have the child who's in nursery or kindergarten, um, the child who's in primary, and the child who's in secondary. So that is how we would've evolved looking at all of the age groups that were missing routine care.

Leslie Schlachter: And what is that routine care?

Ertenisa Hamilton: So it's very broad actually. We looked at it from a systemic perspective of understanding what would be areas that will affect the child, um, getting their education done and making sure that the child is also healthy.

So the screening tiply- typically begins with a vital signs monitoring, and the child then have a- Complete physical examination, and that is age appropriate, looking at all of the developmental areas and milestones that have to [00:13:00] be, um, developed for the child's age. And then we have testing for hearing, screening for eyes.

Um, we also have a screening that looks at the development, developmental stages based on the child's age. So for the nursery school child, a lot of what we look at will focus on their speech, it will focus on their cognition, and all of the other developmental areas. As the child, the age increases, which is a primary school child, we look at other areas.

Um, and for the older primary school child, we also have a mental health screening that is done. And then when we get to secondary, which is mainly adolescent group, we have all of the above that I mentioned prior, with an addition of the mental health. We have a sexual and reproductive health screening that is done, and there's also substance use screening that is done.

So that [00:14:00] encompasses all of the areas that are relevant to each child, um, across the life course.

Leslie Schlachter: As you guys were gearing up to do this, um, I imagine the need was, you know, these aren't children who are generally seeing their

pediatrician every year. Um, what are some of the findings, the diagnoses, the pathologies that are typically being caught with these screenings?

Ertenisa Hamilton: So I think I should explain the way the screening is really designed. Okay. The screening isn't designed at the level of the school to be able to make a diagnosis. What is usually done is that you're able to identify the abnormalities that will exist for the children who will not have the normal screening, and that is our phase one.

That is what we're doing all the time at each school that we go to. And for the children who are identified as having an abnormality, they are then sent a second level of screening where they will interact with the specialty [00:15:00] area, and that is where a diagnosis will be made. And they can be treated at that level, or if there is need for referral because of complexity, then they're referred to another specialized area, um, so that can be solved.

So a lot of what we saw coming out would've been a lot of dental issues- Mm-hmm ... um, a lot of children with challenges with vision. Um, hearing was not really there because we have a well-established program that already existed under the National Rehabilitation Services. And for the older children We are seeing a lot of issues with substance use.

Um, in one way or the other, um, a lot of it is not so much based on continuous substance use, but an exposure.

Leslie Schlachter: Right.

Ertenisa Hamilton: Um, and so that is allowing us to be able to recognize that [00:16:00] there is early exposure It does not necessarily mean that they're using substances, but there is exposure. Um, that is what we saw a lot of persons would have indicated that they have had exposure.

Leslie Schlachter: How did you guys come upon seeing that, like, a school-based approach was better than maybe, like, presenting at a clinic type approach?

Rachel Vreeman: Well, there, I, you know, I think, um, it's, uh, Dr. Hamilton is being modest in some ways in describing how innovative what Guyana has put in place really is. In lots of countries, and, and it was the case in Guyana as well, as she said, you know, there are often these places where babies and really little kids, you know, get their vaccines, get weight checks- Mm-hmm

have that early follow-up. But then for most countries in the world, there's not really a place that kids and adolescents are typically going to- Right ... unless they're very sick, or they're in a car accident, or a teenager gets pregnant, or, you know, [00:17:00] something dramatic has happened- Right ... and, and then they would come.

There are not, um, you know, there are not a lot of pediatricians. There are not generally... And, and the pediatricians that are present, not only for Guyana, but many, many countries, you know, are mostly working in the hospitals- Right ... and not, um, you know, routinely seeing families, seeing kids and, and young people for checkups or, or well-child visits.

So there's not really, um, you know, a rhythm or pattern of place where, where kids and adolescents could easily access those kinds of services. But where kids spend their time and most of their days are at school. Yeah. And so, you know, that it really was a matter of going to where the kids are. And, you know, s- in some places, the US included, and, and in Guyana and others, you know, you'll see, you know, we have school nurses, or we have some health, um, options starting to happen at schools.[00:18:00]

But to really be able to have, um, this kind of comprehensive exam, to really be able to detect who's having problems with their vision, who has dental issues where the pain in their teeth might be really preventing them and keeping them from concentrating in class- Right. Mm-hmm ... where there might be developmental issues that haven't been found yet in a four or five-year-old, or where the adolescent is struggling with mental health challenges before it becomes that crisis that's, you know, too late or really far down the road.

That opportunity to find things early, to connect kids and their families with treatment, and to do it right where they are in their communities was really what led to the idea to, to do a school-based program. And, you know, Guyana committed that they would do this for Every child, every school-going child in the country, and to make that level of screening and care and the follow-up needed for it accessible [00:19:00] is really- Yeah

an incredible thing.

Leslie Schlachter: I would- that, that's kind of where I'm going next. So I imagine, um, you know, here, you know, the United States is bigger than Guyana. Um, but how many schools are we talking about? How many kids at each school?

Screening Implementation and Logistics

Leslie Schlachter: And what does a screening day look like? So I imagine you guys are busy.

Ertenisa Hamilton: We are very busy.

Our target population of all of the school-going children is, um, above 260,000 children. Yep. And a typical day is quite busy. Um, but even in the busyness, we have scheduled the screening to be within the hours when school is in progress. Um, and there's usually the break for lunch. So the way it is set up is that every region, we have 10 administrative regions across the country, every region has a team, and the team visits school after school.

Leslie Schlachter: How big is a team? [00:20:00]

Ertenisa Hamilton: A team can consist from anywhere to six to 12 persons.

Leslie Schlachter: Okay.

Ertenisa Hamilton: Um, and that depends on each region. There are regions that are small with smaller populations to be seen, and so those teams are small. For the regions that have larger population, the teams are usually bigger, um, because the school population is usually bigger also.

Right. And so they see everyone, um, who has agreed to be seen, um, because this is done on a consent basis, um, in which every child is given a brochure to take to their parents, and the brochure includes all of the screening areas that will be done and information for the parents as in why it is important to have your child screened.

And the parents have the opportunity to make a decision. It usually requires a signature, and the child comes back with it.

Leslie Schlachter: Okay.

Ertenisa Hamilton: And they have their screening done. The teams usually go to the schools and- Wait,

Leslie Schlachter: before you move on- Sure ... how, [00:21:00] what is your approval rate?

Ertenisa Hamilton: Um, so we have had a very high approval rate.

We have between 15 to 20% of persons who have not approved.

Leslie Schlachter: Okay.

Ertenisa Hamilton: All of the others have approved for their children to be screened. Okay. But that does not include secondary. This would've just been for primary- Primary,

Leslie Schlachter: okay ...

Ertenisa Hamilton: and nursery. Secondary is seeing a much higher rate of approval with just about 10% of non-approval so far.

Leslie Schlachter: Interesting. Okay.

Ertenisa Hamilton: So we are expecting that it will continue in that trajectory. I think what would've affected approval rates, um, like everything that is new, people are usually looking on to see what happens, and so we saw with each new year and each new level that the approval rate has increased, um, which means that word is getting out what is being done and how it is beneficial for the child because they're seeing.

And our president is a champion. Amazing. He is [00:22:00] championing this so much. Um, it is one of his babies.

Leslie Schlachter: Mm-hmm.

Ertenisa Hamilton: Um, he is very invested in seeing the youths of the country receive the best possible care at every level and every stage of their life.

Leslie Schlachter: Yeah.

Ertenisa Hamilton: And so he has been heavily invested in ensuring that this became a reality for every child who is in school, um, to have that done.

As you're aware, our country's developing rapidly.

Leslie Schlachter: Right.

Ertenisa Hamilton: And this is an opportunity to see how, um, our economy is converting into opportunities for the citizens.

Leslie Schlachter: Yeah, I read something somewhere that 40% of the population is adolescents.

Ertenisa Hamilton: Yes, we have a very-

Leslie Schlachter: That's

Ertenisa Hamilton: incredible ... very large adolescent population.

Yes. And so this is an exciting thing for them to be able to access the service just where they go every day for school. Um, it is on no effort on the part of the parents to take them to a [00:23:00] location. Right. They just go to school, and the screening is done just at school.

Leslie Schlachter: So is it a full day of screening?

Is it, like, around lunchtime or

Ertenisa Hamilton: after school? It's a full day.

Leslie Schlachter: Full day.

Ertenisa Hamilton: So we work very closely with the Ministry of Education because this partnership is not just between Ministry of Health and Mount Sinai. It's a partnership with the Ministry of Education, Ministry of Health, and Mount Sinai. So they were a part of the planning, um, and with them sitting at the table to plan, we were able to work out how it is that we can get screening done.

So usually our partners at the Ministry of Education prepare the schools for their screening activity, and the teachers also participate in getting their students ready. So it is usually done class by class. It may take a day to do a class, um, because screening ranges between 60 to 80 children per day, and so it may take a class a day or two, depending on the size of the school.

So our staff arrives before school starts, and they set up, [00:24:00] and they go class by class, individual by individual, until the screening is done for that day or if it continues into the next day. So there are people who are working in the

school health unit that that's their everyday job. Yep. They go to a school, and they screen, and then at the end of the day, they send in their reports.

Um, so we're able to track adequately on a day-by-day basis how many children we're screening.

Leslie Schlachter: That's incredible. Who's doing the screening? How do you build those teams? Is that paid? Is it volunteer? How does it work?

Ertenisa Hamilton: So the teams were built with persons who were already in the healthcare system. Um, so we have nurses, we have nursing aides, um, and we have clerks, and we have doctors, and we have a category of staff that is called medics, which is your equivalent to the medical practitioner.

So that is, those are the persons who make up the team. We also have optometrists on the team, and we [00:25:00] have, in some cases, audiology practitioners on the teams, and we have physiotherapists on the teams also. Depending on the location, the persons who are on the teams are very diverse. But there's a base team that always has the nurses, the clerks, the community health workers, and the doctors or the medics.

Those are the core teams that is located in every region.

Leslie Schlachter: I would imagine that doing all of this work in Georgetown is pretty straightforward, but what about in more remote areas, and how does that relate to, you were talking about digital health before. So how- what's the logistics in more remote areas?

Ertenisa Hamilton: Well, it's a very beautiful thing if you're able to see what it is like to provide services in those areas. It requires a lot of planning, and the planning is not because the children are not present, but the planning has to do with moving the team to the locations. Um, in [00:26:00] our hinterland, the communities are very far apart, and the traveling is not the easiest, so we usually have to use planes to get to some of the locations, boats to get to some of the locations, and all-terrain vehicles to get to some of the locations, um, to be able to provide services.

And usually those teams in visiting do not return home, um, to their central location. They will stay for an entire week-

Leslie Schlachter: Mm-hmm ...

Ertenisa Hamilton: um, just to have the screening done, and then they return home.

Leslie Schlachter: And then what if specialists are needed? Are they specialists brought in, or is a child moved around from that remote location?

Ertenisa Hamilton: So that depends. If it is non-urgent, the specialist will then follow and visit all of the locations and provide services to the children who need. If it's an emergency, the child is then medically evacuated to the facility to have the services delivered.

Rachel Vreeman: Mm-hmm.

Ertenisa Hamilton: So it's [00:27:00] based on... It's a case-by-case basis.

Are you us- uh, utilizing telehealth at all? We are, um, but not for the school screening. Okay. The telehealth will be for the second phase in which the child will need to be seen for diagnosis. So after the screening is done in school, they're referred into the healthcare system, and if it's a remote location, then the telemedicine or the telehealth, um, the health worker at that facility will make contact with the specialty area, and then they will work through, um, the management and the diagnosis for the child.

But that is dependent.

Leslie Schlachter: What are some of the, like, more difficult logistical things that came up with this as you guys started building this that you were kind of surprised with?

Rachel Vreeman: You know, I think one of the things that we've continued to work around is how to best handle all of the data that are- Mm-hmm

being collected, like-

Leslie Schlachter: It's like, yeah, where do the medical records

Rachel Vreeman: live? Yeah, and well, [00:28:00] and this has been, you know, and it, it's been a transition because in parallel, Guyana is working, and we're working very much with them to implement a national electronic health record system, but we didn't want to wait for that.

We knew that would be still some years away, you know, to start big initiatives like this. So- As this started, we started with paper collection of the forms and creating the forms, and we've been continuing to push toward, towards having this be a more and more robust electronic data capture. So first, you know, going from those paper forms, putting it into sort of an interim database.

We've now, um, taken some additional steps to be able to have the data collection be done directly onto tablets and then, you know, that way at least the data goes in electronically and then can go into the database. And then eventually, when the broader electronic health record system is ready, we want those data to be able to go [00:29:00] into that as well.

But it, you know, raises all of-- There's n- of course, like, those technical things and the different steps as we go and so on, but it also raises issues of how do you identify each of those kids uniquely? Like, how do you, you know, how do you have- Right ... a unique identifier for them? What kind of number might they have or, or things like, like that.

And in Guyana, um, children are not given, um, what would be the equivalent of our Social Security number when they're born. There's a national ID number that typically people get at 16. Um, and so figuring out, you know, how to make sure, you know, we have ways that we're appropriately identifying and tracking- Right

each individual child, because in all of this, in the 80,000-plus children that have been screened, Guyana's really creating an incredible database that reflects, for the first time, the true epidemiology- Right ... of the younger half of their population. [00:30:00] And, you know, we-- And obviously, that's not just a research endeavor or something that's going to sit there.

They're following up on children, making sure they get that next stage of diagnosis or treatment. They're getting them glasses if they need glasses- Mm ... getting d- you know, dental work done if that's what's needed. And so we really want to continually find ways to strengthen how we're capturing data and using it quickly, efficiently, effectively- Mm-hmm

to follow up for children as well with that.

Leslie Schlachter: You said 80,000 kids so far have been screened. That's amazing. Mm-hmm. I imagine you said the president is so invested in this that it's not just like, you know, "40% of our population are adolescents, let's keep them healthy." I'm sure you guys have to present, like, endpoints and data.

So, like, what are you... Like, I guess, what are you hoping to see from this? Like, what's, what is an endpoint you can follow that says all of this is worth it?

Ertenisa Hamilton: Well, it definitely depends on the health outcomes [00:31:00] of the population. We do not have a lot of mortality for our adolescent population, but we find that as they become adults, chronic non-communicable diseases is what is definitely one of the challenging areas of the population.

And so there is the hope that by fostering healthy habits with our children and adolescents, that it allows for the popul- the adult population to be healthier.

Leslie Schlachter: Right. You, you said that dental was one of the top things that you see that you can, that you can work on. Um, but then you just said, um, non-communicable chronic diseases.

So, like, what would you say are the top three things that you guys have been able to pick up that you think you can optimize for them in later in life?

Ertenisa Hamilton: Non-communicable diseases is mainly for the adult population. Within our adolescent population, there isn't any major point [00:32:00] for, um, concern as it relates to health issues.

Um, most of the deaths that we would see are from non-intentional injuries.

Leslie Schlachter: Right. Accidents.

Ertenisa Hamilton: Accidents, drowning, which goes in line with the data that is shown worldwide. Um, but what we recognize, um, and this is definitely data-driven, that you really need to identify what are the underlying factors for what you see as adults.

So all of this comes hand-in-hand.

Quality of Life Focus

Ertenisa Hamilton: Dental issues go hand-in-hand with nutrition. Right. Nutrition goes hand-in-hand with dental issues, and those eventually form a pattern where you can either see the person being healthy, um, as adults or not. And so If we look at the continuum of care and how that influences the individual at each life course, the main underlying factor that you're looking at

is to ensure that every [00:33:00] life course, this individual is living at their optimum health.

Mm-hmm. And that means that, yes, it becomes less of a challenge to the healthcare system. They have a better quality of life. So I would want to say definitely that it's the quality of life that is being looked at here-

Rachel Vreeman: Okay ...

Ertenisa Hamilton: on an entire population-based level.

Rachel Vreeman: Yeah. Yeah. And I think, you know, when we, when we think about adolescents and youth, just as Dr.

Hamilton is saying, you know, they are generally a healthy population overall. Um, and I think when we worry about their health, we're often worrying about, you know, these risky things. Like, we worry about, you know, substance use. We worry about mental health challenges. We worry about early pregnancies and dropping out of school.

But it's, it's ... And it, it is this really critical window when you think about youth health in, in that regard, where, you know, yes, there are, there are all of these things that can [00:34:00] cause kids to easily to drop out of school, to not have the kind of educational and work trajectory that we would, we would hope for them to.

But it's also this incredible opportunity to grow and strengthen their resilience. And a big part of that is if we can, through this kind of initiative, find the things that, um, you know, might put them at more risk and address those early, and we can see where they are currently healthy, and we can reinforce some of those things.

And even with preventive strategies, like vaccinations are- Right ... part of this or, you know, things that are proactively helping to keep them healthy, to keep them in school. The big picture is that we hope, you know, we'll see more kids continuing all the way through secondary school or high school and even beyond.

And I think that's where the president's vision for this is such a big one, you know, that when we look at this population where the almost half of the [00:35:00] country is under the age of 18, how do you long-term keep the

population thriving in all the ways we want? You know, whether it's economic productivity and stability and, and health as part of that.

But a big part of it, for children especially, is keeping them healthy and able to continue in school- Yeah ... and finding those things that would get in the way of, of that.

Teaching Health Independence

Leslie Schlachter: It's something you have to learn. You have to teach how to take care of yourself. Yeah. You know, coming in today, I was thinking to myself, like, "I wonder how many childhood cancers they pick up.

I wonder how many kids they diagnose with, like, ulcerative colitis or something." But then it's also like- Then I thought, "Okay, well maybe there's allergies and asthma-" Mm-hmm ... and all this stuff, but it's not just that, it's actually teaching them you have to take care of yourself every year. I have a 17- and 19-year-old, and when both of my kids turned 16, I stopped calling up for appointments for them.

They know when they have to see their pediatrician, the dentist, the orthodontist, the eye doctor. They, they have numbers in their phone. I don't call anymore. They have to make their own [00:36:00] appointments. They have to do it themselves, and I think that's important, and that's, they know how often they have to do everything.

And so I think just learning that- Mm ... is a really big deal because they're gonna go into their 20s and 30s and their next life courses.

Rachel Vreeman: Absolutely. Correct.

Program Impact Stories

Leslie Schlachter: Can you share, both of you guys, can you guys share kind of maybe, like, either a really incredible story, um, kind of like heartwarming or a big save, something that you're like, "Wow, I am so glad we do this"?

Ertenisa Hamilton: Well, it has to do with the screening, um, because I started out my career in public health as an, the focal point for adolescent health for the country, and I, looking back at what we are doing now to where we started, this

is a huge step. It's a huge step to be able to see every child, to offer them services once a year.

That is a huge step [00:37:00] because there are children who would have gone through, um, their entire primary school or their secondary school and probably just have one or two encounters that would have been initiated by their parents. But now there's this opportunity where you know that it's guaranteed, that it's coming, and if there's anything that is wrong with the child, that there's the opportunity for them to be diagnosed early and to be placed in treatment, and that is heartwarming.

Leslie Schlachter: Yeah.

Ertenisa Hamilton: I get to see myself contributing not to just one person, but to my entire country, and I cannot explain how overwhelming it is sometimes, um- With the joy you get to contribute to your country. I am a patriot at heart. I love my country, and getting to do this every day, um, counts in a very big way for me.

Rachel Vreeman: Wow. What about you? I mean, in many ways, um, this, this has [00:38:00] been, uh, such, such a privilege to walk alongside the Ministry of, of Health in this endeavor. Um, you know, I, I love as a pediatrician taking care of individual children and getting to see that kind of contact. But as Dr. Hamilton was saying, um, you know, even though in many ways I'm...

I mean, we've been at the screenings and things, but I'm, you know, a step removed from it in a, in a certain way. But every single time we get one of the reports coming, you know, each week or each month and we see these numbers accumulating, it's just so incredible to think that those are children who maybe never had a stethoscope on their heart before, who maybe we didn't ever, you know, know before that, that this child was struggling with mental health issues- Right

which is something we're seeing a lot, um, especially among the older children as well. Like, just these things that otherwise families and [00:39:00] children and their teachers too, you know, are struggling with and wrestling with in, in their own ways, and to suddenly be able to open up some of this and then let, uh, you know, them have access to people who can help or to resources that are there.

And while of course we're also still working to grow those resources, it's, it's really amazing to start to see that unlocked. It's also been, um, a real privilege to

see how the impact of the school screening connects families in a much broader way into both the health system and into the work we're doing.

We've been- I was at a clinic in one of, or, um, it was actually a, a polyclinic they call, like a larger clinic, almost like a small hospital, in one of the, the regions where, um, we are waiting to, to see someone and, and I think was introduced that I was from Mount Sinai. And a woman who was waiting there was saying, "Oh, my [00:40:00] granddaughter," you know, "was, uh, was seen in the school."

And she was just so positive that, um, they'd had that interaction spec- and, and knew that it was something that the Ministry of Health and Mount Sinai had done, and had brought that in this different way. I think it also creates this connection that we really are giving families what they- Yeah ... need and, and i- in many ways helping with, you know, they, everyone cares about their children- Yeah

the most. And- Is

Leslie Schlachter: there any cost to the families for this? No.

Ertenisa Hamilton: No cost to the family. It is all being taken care of by the government.

Rachel Vreeman: That's incredible.

Ertenisa Hamilton: Yeah. Yes.

Rachel Vreeman: And, I mean, the government's commitment to that universal health access, not only is access is incredible, but is if they need glasses, the child gets glasses.

If they do need- Yeah, like if- ... a hearing aid, they get a hearing aid ... so even the specialty

Leslie Schlachter: things, whatever- Everything is free of cost It's all free. It is

Ertenisa Hamilton: all

Leslie Schlachter: free. No cost. Well, we can learn something from

Rachel Vreeman: this. It's a government that really, really prioritizes the health of their people.

Leslie Schlachter: People, yeah. Um, a couple of things that I was also thinking about.

What [00:41:00] about, I don't know what the term is used, but, like, you're at an age group where girls, um, is it called period poverty? I don't know what the word is, but, um, h- do you guys help with that at all? Do you give any supplies? Do you teach about how to manage your period?

Ertenisa Hamilton: Our first lady, just like her husband, is very invested in the health of the youths in Guyana.

Leslie Schlachter: Mm-hmm.

Ertenisa Hamilton: And so the first lady has started a program that she works with the Ministry of Health and the Ministry of Health Education in looking at period poverty. So we have a menstrual hygiene program in which the girls receive supplies on a yearly basis, but not just supplies. There's education that goes into it on how to take care of your body and how to be able to take care of your, um, needs during your menstrual cycle So this is a countrywide program for girls who are in school- Mm

um, looking at period poverty. And outside of the healthcare system, the first lady also does work with communities, [00:42:00] um, and looks at period poverty.

Leslie Schlachter: And I know you guys were talking about pregnancy before- Mm-hmm ... but what about birth control?

Ertenisa Hamilton: So that is a topic that is still being reviewed. We're still working on it.

Um, it is available, um, but a lot of work still has to go into the education of the adult population or the parents.

Leslie Schlachter: Right.

Ertenisa Hamilton: We're still a country that is very taboo on some conversations. Sex is still a little bit taboo in Guyana. Mm. Um, and so there is a

lot of work that we're still doing, um, with parents and the general population in terms of sex, um, and sex education, comprehensive sexuality education.

Leslie Schlachter: Is sex education offered in the school outside of the clinic?

Ertenisa Hamilton: Of course. Yes,

Leslie Schlachter: okay.

Ertenisa Hamilton: So there's a special program, um, that has a curriculum that is called the Health and Family Life curriculum in which they teach each student life skills, and part of the life skill education, um, is [00:43:00] sexual education. So yes.

Great.

Rachel Vreeman: Yeah.

Ertenisa Hamilton: Yes.

Rachel Vreeman: And they do, it does, um, in the school screening program, they have also worked to really supplement and reinforce some of those health education topics. So age appropriate- That's right ... you know, really- Yes ... thinking about things like nutrition and some of the, the building blocks for the younger kids, and especially with- Mm

the older kids and the adolescents starting to have materials and talk through, you know, puberty and normal development and some of those basics. So really reinforcing what's already happening in the curriculum or what might be there- Mm-hmm ... but again, emphasizing it. And, and I think it's such a great touchpoint when you're, you know, having the health screening.

It's of course a great time. Everyone's thinking about your health and your body and what's normal and what's not normal- Right ... and it's such an important time to reinforce those healthy choices or appropriate, accurate information that you might need and, and so on. Yeah. So they're taking good advantage of that during the [00:44:00] screening programs as well.

Mental Health Challenges

Leslie Schlachter: And then you had said that maybe not in the primary school age, but, um, in older age groups, that mental health was an issue. Mm-hmm. Like here, here in the United States, I know, like our kids, like my kids go to school, um, I have one in college and one in high school, but like kids are getting cell phones, iPads, all this stuff at a very young age, and I absolute- like the addiction to phone and how that affects them, that's real.

What's, what's happening there? Like are, are, are the kids using these tablets and electronics? Like what would you say... Yeah, so what does this look like in that location?

Ertenisa Hamilton: It looks the same in every part of the world- Yeah ... including Guyana. They would spend a lot of time using their phones, and that seems to be the, the, the main mo- mode of communication with their- Yeah

friends, um, with their parents sometimes. Yeah. And so we are actively working, um, to look at how we address this. Um, there is a conversation that would've been [00:45:00] started at the Ministry of Education to really look at this. And so it is now in the stages of development where we're looking at how it is that we can actually Look at the addiction, um, with the phones and the smart devices, and how to address it in a way that it benefits the child.

Mm-hmm. Right. Um, we recognize that our circumstances are different, and so motivations for different things are different, but it's something that we're considering.

Leslie Schlachter: Yeah, I mean, I guess everybody has that problem. Yeah. I mean, it's the anxiety and the stress that comes with- Yeah ... social media and being on your phone.

Rachel Vreeman: Yeah. Yeah. And we start, we start screening for mental health challenges, um, in the children at age 10. Mm-hmm. And, you know, it was very striking as, when we were in the planning stages of, of this effort, you know, the teachers and the counselors from schools, everyone saying over and over again, not only, you know, pushing the, to make sure the age was at least going down [00:46:00] to 10, but just really sharing so many stories about the challenges that they see with mental health and those issues of- Yeah

anxiety in others and, and the, the, yeah, concerns with screens and those things being part of- Yeah ... what is there as well. It was not like this 20

Leslie Schlachter: years ago, was it? No, it wasn't. Like, the level, yeah, no. It wasn't. I mean, this, this is, this is real. I mean, I, I wish there was a way that I could have my kids just, like, not have a device.

Sit in a car with your head against a window. I wish we could go back to that in some way, but yet, here we are.

Ertenisa Hamilton: We're working on ensuring that they start reading in my own family and pushing my kids to read, and you should be telling me about- Like, an actual

Leslie Schlachter: book ...

Ertenisa Hamilton: an actual book. A hardcover book, not on your tablet.

Yeah. Um, but you read and you tell me what it is that you read. Within the context of Guyana, there's a lot of work that goes into literacy, and so there is, our exams are big on literacy. And so the children have to read because [00:47:00] you do have to write a story, um, at your main exams, and so you have to read because your imagination has to be active-

Leslie Schlachter: Mm-hmm

Ertenisa Hamilton: and you have to transfer that into an actual story. So I push, and most parents are pushing to ensure that the children are reading. Yeah.

Leslie Schlachter: Yeah. That's a tough one. I, um- It's tough everywhere ... my daughter would kill me for saying this, but she, she loves to read, and then she forgets that she loves to read.

Whenever we go on vacation, she, she consumes, like, two or three books, but then when, regular in life, she just can't get off her phone. Then on vacation, she's like, "I love to read." I was like, "You can do this anytime." "You don't have to do it just on vacation."

Rachel Vreeman: Yeah.

Global Health Partnerships

Leslie Schlachter: Um, so we have a partnership with, um, Guyana.

Mm-hmm. But do we have any other partnerships with other places that we're working with- We do ...

Rachel Vreeman: that you're a part of? So our other global partnerships where, where we focus a lot of our attention are in Ghana. So we're always- Mm-hmm ... having to say clearly-

Leslie Schlachter: Overemphasizing ...

Rachel Vreeman: Guyana and Ghana, [00:48:00] um, as well as Kenya and Nepal.

Okay. And then, um, the Arnhold Institute for Global Health at Mount Sinai also supports a New York-based partnership, uh, that is specifically working with the H&H Elmhurst and Queens hospitals w- for bringing these same kinds of innovations in care and global practices- Yeah ... to the community in Queens as well.

Leslie Schlachter: Yeah, 'cause, like, I know for me growing up about, you know, the same age, we- when we were in school, I don't know what it was for you guys, but it was, like, lice and scoliosis. It's so, it's so true. Like, they picked your head for lice and looked for scoliosis, and, like, that was it. Was it anything else? I don't even remember You know,

Rachel Vreeman: I think, I mean, yeah, in terms of like what we had at school, I think that was about- Yeah

the same.

Leslie Schlachter: Yeah, and whoever wasn't- The same in my experience also ... in school after lice day, you knew had lice.

Rachel Vreeman: I think they checked our vision periodically at school as well, but yeah. Yeah. I mean, this is a much more comprehensive program.

Leslie Schlachter: I know,

Rachel Vreeman: I- amazing And yeah, and truly, you know, the way that it, it's really been only the last year and a half that the initiative, maybe t- maybe [00:49:00] we're getting close to two years now, but you know, those 80,000 plus children that have been screened, that's in the last one and a half to two years.

I mean- Yeah ... launching this- That's amazing ... this work. So it's really a- an example not only for the region, but I think a global example of, I don't know another country in the world that has moved forward something this robust nationally or this quickly. I mean, you see some countries, you know, trying to set up some school-based care or other, you know, child- Mm-hmm

initiatives, but to really commit to something like this for every school-going child in the country, and make it a really integrated program so it isn't just-

Leslie Schlachter: Right ...

Rachel Vreeman: going and doing the scoliosis screening or going and doing-

Leslie Schlachter: Yeah ... a young vision- A lot of places ... test I mean, even here in the United States can learn from this.

I know that- Yeah ... school-aged children here in the United States, in order to get through the doors of a school, you have to have your physical and everything filled out. Um, but then it kinda like stops there. There's, whether it's insurance issues or [00:50:00] whatever, there are a lot of times people, even just vision-

Rachel Vreeman: Yeah

Leslie Schlachter: people like squinting, not even realizing what they're missing, there's a lot that gets missed, so we can learn a lot.

Rachel Vreeman: Yeah.

Expanding Services Beyond Screening

Leslie Schlachter: Well, I imagine you are incredibly proud of this project. I, those are all my questions, but I wanna make sure that you have the opportunity to share everything that you wanna share.

Was there something that we missed?

Ertenisa Hamilton: Well, first of all, I do want to say thank you to the Mount Sinai team for really working with us to get this started, and the continuous support in ensuring that we are working towards making this very sustainable, and looking at all of the areas that we do have to have incorporated in a school

program Because we recognize that the system now has to adapt to what we're doing at the level of the schools, and work has started on ensuring that the system is able to manage everything that we've started and that we're [00:51:00] identifying in the school screening.

So this has evolved into something much larger than where it started, and I anticipate that it is going to just grow and get bigger. Mm-hmm. And because the lessons learned are allowing us to be able to strengthen different areas of our primary healthcare program. So this has really been working out for ensuring that the Guyanese population have access to quality health services.

Leslie Schlachter: Amazing. What about you? Anything else you want to add-

Rachel Vreeman: Yeah, you know- ... I didn't

Leslie Schlachter: ask?

Rachel Vreeman: I think, um, one of the things that strikes me is that Dr. Hamilton and the Guyana Ministry of Health team, you know, they, they have not been content just to, you know, even let this be as this big school screening program, but really thinking about where those other services are needed.

For example, you know, our teams I know have been engaged in, um, training around mental health supports for counselors and [00:52:00] teachers as well as working with other healthcare professionals. They've been thinking about how to offer Other places where the adolescents who have, you know, needs or, or health issues identified can receive those services.

So not only having the school-based efforts, but then setting up more robust centers for adolescent health, having ways that, you know, even regular health centers or posts might be more accessible to youth to be able to come there if they need to. Training up champions for the country who would be focused around youth health.

On the younger end of the spectrum, they've launched work to, um, train teams to better diagnose autism and then provide, and, you know, related developmental disorders and then start to, um, be able to provide the kinds of therapies and, and services that we know are so critical to get- Right ... early on, especially with, [00:53:00] with developmental challenges in those ways.

So, you know, it's not only about, you know, getting every child screened and getting all of these numbers, but then really continuing to work- Providing

Leslie Schlachter: the

Rachel Vreeman: services ... on providing- Yeah ... the services that go along- Yeah ... with that that are needed.

Leslie Schlachter: Yeah. I mean- So ... we, um, we're really lucky here at Mount Sinai that we have all of our departments and institutes that you guys could kinda reach into for help when needed.

That's

Rachel Vreeman: great. Yes, and that's exactly what we do. When we, when they identify something they need, then we go out and- You're like, "Hey" ... try to find the right experts at- Yeah ... Mount Sinai to help. And even, even today, you know, thinking, um, for, you know, unique care models like actually our CARES program in terms of what it looks like to provide really, you know, holistic substance use counseling and support and services for- Yeah

youth here and, and then figuring out what we can take from models here as well as from, you know, the data and evidence around the world, and then put those best practices into place in a way that works for Guyana. [00:54:00]

Leslie Schlachter: Yeah. You're gonna end up having to travel the world teaching everyone else how to do this.

She is. It's true. All over the place. New York is her first stop for right- Yeah ... kind of work. What's great about this podcast is not only do we have a lot of patients listening, you know, people that maybe are afraid of coming to see, um, a provider, but we also have a lot of providers. Um, are you guys kind of like past the point of needing volunteers?

Or what if there's people that are like, "I wanna get involved with this. This sounds amazing"? Do you guys accept volunteers?

Rachel Vreeman: We do. Um, we, and we really coordinate that through, uh, the Arnall Institute for Global Health at Mount Sinai in terms of where we have gaps or places where we need expertise. This really is a, an initiative run by Guyana and the Ministry of Health, so it's not so much volunteers to, you know, staff school screening programs.

They have their teams and their unit, but we are always drawing on the expertise of people from across Mount Sinai and with different talents and, and

often, you know- Or even other projects ... we can figure that out. Uh, yeah, and [00:55:00] with other projects as well. So people are always welcome to reach out to us.

So really

Leslie Schlachter: your program is already built with its champions and running full force? Yes. It is

Ertenisa Hamilton: adequately, um, integrated into, into the services that we're providing.

Why Global Health Matters

Leslie Schlachter: I'm certain that everyone listening, most people listening to this will be like, "That's amazing. That's... Like, I'm so proud." But then there's gonna be people that are like, "Why are you, why are you doing all this work to help out people in Guyana when there's people here in the United States, New York, like right here in Harlem across the street, that need our help?"

So like why is this helpful to us, Mount Sinai, and the people in the United States and New York?

Rachel Vreeman: Well, there are a few different ways I could answer that. Lots of reasons to think of. First, of course, and foremost, like of course Mount Sinai is doing a huge amount of work here in New York and, and supporting people here.

But even more importantly, we learn how to take better care of people here in New York from the kind of work that we're doing. These are lessons learned for all of us, and [00:56:00] it is part of how we use our health systems expertise to get better and better. So figuring out what works here, what works in Guyana, what works in Kenya, that only helps all of us.

It, it creates more access to health everywhere, and we would love to see both access to health and quality of healthcare improve for every person in the US and every person in, in Guyana. It's also part of how we relate to our neighbors in a sense. So, you know, health, diseases, these are not things that actually respect borders.

Any of us getting healthier or staying healthy helps all of us. We saw that during the global pandemic- Right ... most recently. But even beyond that-

Leslie Schlachter: Actually, to take that a step- Yeah ... further, I remember, because I work, like, in an ICU, my patients are in [00:57:00] a neurocritical care unit, and we were actually one of the first COVID units.

And I will never forget the first couple days, our ICU doctors, our neurosurgeons, they're calling their friends overseas in Italy like, "What do we do now? What's happening?" 'Cause they knew before us. Mm-hmm. So having those relationships outside of your country, that was, I mean, potentially lifesaving.

Rachel Vreeman: Yeah,

Leslie Schlachter: yeah.

Rachel Vreeman: And, you know, also working in health strengthening, healthcare improvement, you know, improving healthcare in other places, it is part of how we build relationships. It's actually, you know, when we are working in Guyana or in Kenya or in Nepal, that presents a very different picture of the US than you might get from reading the newspapers- Right

or seeing other things happening in the world. And it is part of how we build allies, [00:58:00] friends, not just one-on-one friends, but also how our country, how our health systems, how our partners create more, um, partners and allies- Goodwill ... around the world.

Leslie Schlachter: Yes, this is feel-good stuff.

Rachel Vreeman: Agreed. Yeah. And I mean, and it's, it is also people's lives.

Yeah. I mean, it's every parent, you know, feels the same about their child, that precious child, that they want to have them stay healthy and grow up and have all the opportunities, uh, ahead of them. And I think for all of us together, we come together in this particular way around that, as well as, you know, thinking about what that looks like for a hospital system, for data systems, for, you know, what you need across the- Right

system that way. Right.

Closing Remarks

Leslie Schlachter: Well, congratulations. This, this was so much more than I thought it was gonna be coming in today. So I thank you for teaching me and, and all of our viewers. Thanks. Thank you so much.

Ertenisa Hamilton: The pleasure's all ours. Thank you for the invitation.

Rachel Vreeman: Yes, thank you.

Leslie Schlachter: So that's all for this episode of The Vitals.

I'm your host, Leslie Schlachter. To learn [00:59:00] more about Mount Sinai's work in Guyana and elsewhere abroad, scan the QR code on the screen or click the link in the description below. To get in touch with the show or to suggest an idea for a future episode, you can email us at podcast@mountsinai.org. Subscribe to The Vitals and the Mount Sinai Health System's other video podcast programming on YouTube, Apple Podcasts, Spotify, or wherever you get your podcasts.