

**“That’s Understandable” Season 2 - Episode 4**  
**“The Pill Jar Problem” Transcript**  
**Final 06252024**

**Brendan (00:07)**

Hello everyone and welcome to That's Understandable. I'm your host, Brendan McEvoy, US head of external communications at AstraZeneca. If this podcast has been enjoyable and informative for you, take a moment to like and follow on your favorite streaming service. And if you know anyone else interested in today's topic, be sure to share because our goal is to help make everyone, because our goal is to help everyone to better understand what science can do when we all work together.

With that goal in mind, we are currently accepting nominations for guests for season two. Could you or someone you know offer a unique perspective on scientific innovation, sustainable healthcare, or health equity? If so, check out our show notes for how to connect with us.

Picture this. You're sound asleep and your alarm clock goes off. You roll out of your bed and start to get ready for the day. You check your phone, get dressed, turn on the coffee maker, and pour yourself a glass of water to take morning medications. As you open the pill jar, you realize it's the last pill. Now you've got an empty bottle to deal with. You consider throwing it away, but you remember that article you saw about all the plastic waste that goes into landfills, and you pause.

You could recycle it, but you really don't want to make a trip to the drop -off for one bottle, or maybe your town doesn't accept pill jars in the recycling bin. So you pitch it and promise yourself you'll recycle it next time. Feel familiar? According to a Forbes article, nearly 194 billion single -use plastic bottles are used every year. Of those, less than 3 % end up recycled. The rest? Landfills. But it's bigger than that.

According to the World Health Organization, U .S. health care facilities produce up to 3 ,500 tons of plastic waste every single day. That's enough plastic waste to build three replicas of the Statue of Liberty each month. We're going to need some big ideas to deal with this issue. Fortunately, our guest today is helping lead the charge to reduce plastic waste in healthcare. Dr. Melinda Lee is the CEO and co -founder of Parcel Health, Inc., a Pittsburgh, Pennsylvania company focused on creating innovative and sustainable packaging for the pharmaceutical industry. Dr. Lee is also a pharmacist. Hello, Dr. Lee. Thanks for joining us today on That's Understandable.

**Melinda Lee (02:11)**

Hey Brendan, so good to be here and feel free to call me Melinda.

**Brendan (02:15)**

Well, do Melinda. All right. So let's start with the big question. How did we get here? Why is plastic waste such a problem in healthcare?

**Melinda Lee (02:25)**

Yeah, I mean, I want to start off the episode just being clear that I'm not here to be a plastic hater. Plastic is a wonderful material, too good actually, and that's primarily the reason why it won't biodegrade. It's really hard to recycle. It's just such a good material. Yeah, to your question on how we got here, you know, medication containers used to be primarily made out of glass. And I actually recently found out that Pittsburgh was one of the major hubs for

manufacturing these glass bottles for these older apothecaries in the 1800s and, you know, early 1900s. So it's really, really interesting that we're building our company here now, making sustainable packaging that's paper based for pharmaceuticals. Yep. So we started off with, you know, glass bottles and medications way back in the day. It primarily are liquid based medications. So they, you know, they stayed in glass jars. And there was a moment in history where paper boxes became more common for pills when pills became more commonly manufactured as the preferred dosage form, but quickly that transitioned over to plastic pill bottles. They're just so light, they're so cheap, and the introduction of child-resistant regulation also made that transition much quicker. So we've been using plastic pill bottles for the last 50 to 80 years and there's just been no change.

**Brendan (03:52)**

Yeah, no, that's interesting. And I, to kind of think through the evolution of the pill bottle with you, Will, I think I'm, in my mind is sort of an old movies where you're seeing like, you know, the apothecary or going to the local town pharmacist with the glass bottle. So it's, yeah, I sort of misremembered that. So tell me a little bit more about your company, Parcel Health. Can you explain to our listeners what the company does and how did you get it started?

**Melinda Lee (04:21)**

Yeah, so I'm a pharmacist by training. I went to school to study what goes in the bottle, not the actual bottle itself. I really stumbled into this space really by accident and because the school I attended had a lot of support for students who wanted to be entrepreneurs and try out new ideas. So at Parcel Health, we develop sustainable medication packaging for pharmacies and pharmaceutical products. Our goal is to reduce the amount of plastic packaging.

and to sort of increase the sustainable packaging options for pharmacies and pharmaceutical companies. We have two different products. One is completely plastic free. And this is a complete paper-based container that can hold medications. It's also water resistant and humidity resistant. We have a second product that has a little bit of plastic in it in order to fit into certain automation systems that are currently in place in pharmacies. So. We believe in harm reduction and so we've sort of developed our product to sort of try and push the envelope to reduce the reliance of plastic as the primary packaging.

**Brendan (05:27)**

Great, thanks, Melinda. So for years, plastic has been championed as a highly recyclable material. And to your point earlier, this isn't an episode about being plastic haters, right? It serves a purpose and a need. But according to NPR and Greenpeace report, the US currently only recycles about 5 % to 6 % of its plastic waste. And the EPA estimates that only 10 % of all plastic ever produced has been recycled.

So, you know, I work at AstraZeneca and I can speak on behalf of us that we are committed to reducing our impact on the planet. And we're always looking for ways to incorporate circular economy approaches like reusing, recycling into our process and production decision, everything from lab to patient. But I'm curious from your perspective, what can pharmaceutical and healthcare companies as well as patients do to increase the overall recycling percentage?

**Melinda Lee (06:22)**

Mm -hmm. Yeah, I'll quickly touch on the the statistic you mentioned earlier that 3 % less than 3 % are recycled and that's absolutely true. I think we don't really see it in the US because a lot of this plastic waste like we don't see plastic waste floating down our rivers or washing up ashore on our oceans and that's primarily because most of the plastic that you know, we toss into our recycling bins or our trash all of it tends to get shipped abroad to other countries.

So I'm an immigrant from Malaysia and a huge chunk of the American and European plastic waste gets sent to my home country and they sit in our landfills and they pollute our waters and our oceans. And so it's a problem that's not visible. And so sometimes, you know, as consumers we hear these statistics, but it's really hard to wrap our minds around it because we don't see it, you know, right in our neighborhoods.

And even when plastic recycling is happening within the United States, they get sent to incinerators, especially plastic that has been used to touch medications. They get sent to incinerators and local communities where incinerators are at, their rates of asthma and lung cancer are 40 % higher than national averages. So this is a problem. We don't see it, but it's affecting other communities.

And then to your second point of your question of, you know, how to think about it, right? Like, how should we think about plastic waste? And again, just like you said, this is not a plastic-hating episode. Plastic is a wonderful, wonderful product. The problem is it's just really, really hard to recycle. There's really very few regulatory guidelines on how to even utilize recycled plastic materials within the health care packaging system. So that's definitely one barrier.

But the other one is just harm reduction, right? Like really think about, you know, is plastic being used here only because it is the cheapest product? Is it doing anything else? I think in certain circumstances like IV bags, you know, where it needs to be sterile and it needs to be light, that absolutely makes sense where we should be using plastic there because it's not just a cost, a low cost solution. It's also serving additional purposes. But when it comes to prescription pill bottles, whether it's the pill bottle that patients receive or it's the over-the-counter container, is that being used because it is the cheapest? Is it doing anything else? There are other functions of, it has to be light for transport, it's got to be opaque so light doesn't get through. A lot of other materials can achieve those same goals without that same level of pollution.

**Brendan (09:08)**

And you mentioned from a policy or regulatory standpoint that maybe there aren't sort of as good a guidelines or recommendations there that could help in the space. Are you seeing, you know, one of the, as you were talking earlier around one of the reasons it's one of the reasons there's maybe not a lot of attention around this is because it's not being seen, right? To your point, we're not seeing piles of bottles or plastic in our neighborhoods, in our communities, and it's sort of like that whole out of sight, out of mind. Typically, it takes something very visible in order for us to act. So if from a policy, from a state or federal level, are you seeing any sort of energy there to tackle the issue?

**Melinda Lee (09:54)**

Absolutely, I think you know California just passed a law a state law requiring manufacturers within the state to I think within the next 10 years reduce their single-use plastics Or use for cycle plastics in their packaging seven other states. I believe are also following suit Something that frustrates me is that in a lot of these? Regulations that are being drafted the healthcare industry in particular is being excluded from being covered under these so again that sort of puts

you know, the regulations there to sort of talk about food packaging and, you know, stuff that we put in our mouths as well, just like medications, but that healthcare industry sort of gets, you know, a pass because nobody really wants to touch it. Everyone is just absolutely terrified. And in the meantime, you know, just from the statistic that you brought up before, healthcare industry makes a ton of plastic waste because there's a need for sterility. But there are many applications in healthcare where sterile, packaging is not necessary, right? Packaging for

medications in the outpatient setting, in the pharmacy setting, those pill bottles are not sterile. They don't have to be sterile. And so the use of plastic there is really an overkill in terms of the pollution that it brings.

**Brendan (11:11)**

***Transition 1***

*Melinda laid out the scenario wonderfully — the properties that make a great material for packaging are the very things that made it an environmentally harmful choice for single-use products. Melinda is focused on providing a safer, more environmentally friendly alternative for medical packaging and I wanted to hear more about the progress she was making.*

Yeah, it makes me think, you know, last time I had to fill a prescription, you know, you're waiting in line at the pharmacy counter, right? And everyone seems to be walking. You can hear the pills kind of clicking in the plastic container. Is, or I should say rather, have you made any progress partnering with some of these large pharmacy chains or, you know, healthcare pharmaceutical companies? You know, I guess, have you, you know, had any success with that or even?

What have the conversations been and what's the response been when you've approached some of these organizations about your sustainable solution?

**Melinda Lee (12:12)**

Yeah, we're talking to several of the largest players in the space about it. There's definitely an interest and a hunger to reduce their packaging, their scope three emissions, right? Because packaging really impacts their scope three emissions. Everyone is always very, very interested in a plastic reduction or CO2 reduction initiative. I think it becomes tricky when there is sort of that cost differential.

And it's frustrating for me because it's like, you know, this is an investment or this is a switch in which it's going to cost maybe five to 10 more cents to use something a little bit more sustainable and easier to process at the end of the life cycle of the product, right? It's easier to recycle or it's easier to repurpose versus, you know, this is not an investment where it's like change your entire, you know, delivery fleet to an electric fleet or change, you know, all the, you know, this is not a huge infrastructure sort of investment where it takes, you know, millions and millions of dollars. This is a, you know, on a per unit basis, this is like five to 10 cent difference. So it's hard to sort of navigate those conversations because it's not as sexy. I think it's not, you know, it's not, you know, you're not going to get a nice electric car parked right out front of your pharmacy or, you know, or your, you know, your store.

But with that said though, so one of the most important things we've done is doing a life cycle analysis of our product. So for example, the plastic free container that I mentioned, it's called the fill box. It's a box. So it is 72 % less CO2 emitting throughout its life cycle. So from raw material harvesting all the way to production, to delivery, to the pharmacy, to end use. Having that number is incredibly powerful and has been powerful for us in talking to these larger players who are sort of anticipating these new SEC reporting requirements for these publicly listed companies to report their CO2 emissions, because these companies that are using a ton of these plastic pill bottles, a 70 % reduction immediately, right? Like from just switching their supply of their pill bottles is huge. So having these quantitative numbers is really, really helpful for us. And that's sort of how we've been approaching these conversations.

**Brendan (14:39)**

Yeah, that 70 % number, that's significant. And when you talk about scope three, I know that's typically the most difficult, right, for companies to combat. So to be able to implement a solution like this and have such a significant benefit, you know, essentially right away is critical. So we talked about from an organization, you know, a healthcare company or a pharmacy, what about from a patient perspective? You know, what would the sort of impact be to a patient? How would they sort of experience it differently? Is there any sort of benefit or potential downside, if you will, from a patient perspective in company switching?

**Melinda Lee (15:25)**

Yeah, not at all. And I think at the beginning of the episode, you paint this picture of someone who takes their medication and then now you want to recycle it, but you're not quite sure what to do with it. We get so many requests to take people's plastic fill bottles. There's so many people who hoard them because they don't want to toss it in the trash. They want to recycle it responsibly, but they don't know what to do with it. So I definitely empathize with that story.

I myself, because I go to a pharmacy that uses our products, so I have not received a single plastic pill bottle in the last two years. It is wonderful. The only plastic pill bottles we have around the office are just stuff that people drop off because they want it to do something else. Yeah, so from the patient's perspective, not at all. So the primary reason I had gone into this, along with my co-founder, Mallory, she's a product designer. And so when we went into this, sustainability was obviously top of mind, most important to us.

But we knew that we also had to create a product that was actually better for the patient. And something that really frustrated me when I was a pharmacist was that patients would sort of not pick up their medications, you know, and they would sort of talk about how this new, all-natural, you know, product that was peddled on social media or by their uncle or their aunt or someone they met, you know, at the local coffee shop, peddling supplements or, you know, just absolutely, you know, just, just ineffective sort of pills, but they come in very beautiful packaging, right? These packaging, when you purchase them off of Amazon or these direct-to-consumer companies, it is so beautiful. And I completely empathize with that because as a patient, you know, this is a very scary world, right? People are telling you not to eat toxic products. People are telling you to eat healthy. And you buy the supplement and it feels good, just feels good to hold it, has leaves on it. And you're like, yeah, you know, this is going to help me live a better life.

And then you contrast that to them picking up their medication from the pharmacy. And this is life-saving medication, FDA approved, gone through 10 plus years of research. Some of this have been off patent. They're generic. So there's like 50 year plus of research backing its safety. But it's coming in this bright orange plastic pill bottle and the label on it is barely legible, right? You can barely read your name, the directions. It's in a typewriter font sometimes.

And I get it. I get it as a patient. You look at the two and you're like, well, I feel like I should try the one that looks nice. Now it feels a little safer. And so when Mallory and I went into design this, we wanted to make sure whatever we came up with was sort of help patients develop that trust with the medications that they're taking in the container because they're, you know, this is something they're touching every single day, right? They're opening the bottle, they're feeling it every day and you want to make them feel like they can trust what they're taking out of this container. It's got to come in a container that looks trustworthy and not a plastic dinky container that you can't even organize because it just kind of like topples all over the place.

**Brendan (18:29)**

Yeah, now that's interesting because we are, we're so visual, right? So like we, the creative, the cool looking packaging tends to sort of catch the eyes. And in a world today where, you know,

you're seeing, you're inundated with ads, especially across social media. I can see how it becomes even more difficult to sort of win over, right? When you have a sort of a more simple, less sophisticated looking design. You know, I want to, I want to go back to in a minute on talking about some of those barriers to companies adopting costs. But one of the things that I sort of failed to do upfront that was just coming to life for me as you were talking is what sort of drove you to even co-found this company? What was the moment for you that you're like, I've got to do something about this?

**Melinda Lee (19:21)**

Yeah, that's a great question. Sometimes I sit down and ask myself, what did I do this? It's easier to just work as a pharmacist, I think. Why am I trying to change this gigantic industry that's so reliant on plastic? Great question. I was standing in the pharmacy going through just hundreds and hundreds of these pill bottles. And I had learned that a lot of these plastic were being exported to my home country. And 45 minutes away from my parents' house, there's a landfill just filled with plastic waste from America and Europe. And I'm standing there just dispensing these, you know, and sometimes patients don't pick up their medication. So there's nothing you can do about it. You can try to return it. If not, you know, you just take out these bags and bags of plastic bottles and you toss it in the trash. And I was like, this is all going to my home country. Like here I am just like dispensing them and they're going, they're going to go pollute, you know, my parents backyard. And I look at patients who are struggling with this pill bottles. It's really hard to open. It's really hard to read. You know, they're, you know, they're taking their money to buy these other supplements. And it was just so frustrating to just stand there and feel like I can study and learn so much about health. But when it comes down to that execution piece, the product that I'm putting out there is frustrating the patient. And separately, when they're done with it, it's going on to pollute the earth. So that was really what drove me. And I was very, very lucky. I met my co-founder who, two years before I even came across this problem, she takes medications.

And so, you know, she came up with this completely reusable system and won an award. But because she was a product designer, you know, she had a hard time talking to pharmacists because people are just, we're just so busy, right? Pharmacists, we don't like change. We just like, don't talk to us. We just want to get our stuff done, get out of my way. And so when we both started working together, you know, it was super synergistic because I could, I used terms that pharmacists were more familiar with and I could get us behind the counter, right? And talk to the pharmacists. And that's really how it started.

**Brendan (21:18)**

Yeah, no, that's fascinating. Maybe my naive view, I'm not surprised that prescriptions are filled and patients are picking them up. I guess in my naive view, I was thinking, they could just empty the medicine out and reuse the pill bottle. But I guess that for contamination reasons and everything else, it's not. So that is a whole nother layer in addition to people actually taking the pill, their pills, the pill bottle home with them and using the medication.

**Melinda Lee (21:41)**

Yeah, and I would tell you a lot of pharmacists and pharmacy technicians out there. We try our best like we you'll sometimes see the the The shelves, you know, they'll have several plastic orange plastic pill bottles just lined up right against each other because we're trying we're hoping we're like Please hopefully someone will fill exactly 30 pills of this within the next month so we can take the the other patients label off and put a new one in dispenses we try but they're just the sheer number of prescriptions that just goes through a pharmacy just so high, it's sometimes just impossible. You just have to toss it away.

**Brendan (22:25)**

**Transition 2**

*As Melinda explained the progress she is making into providing an alternative to plastic packaging for healthcare products, she mentioned there were some barriers, as well. I wanted to hear more about why the benefits of using paper outweigh the barriers to its adoption.*

So now I'll go back to the barriers that we're talking about. So I think the most significant one that you shared is really cost, right? And you said it's very, very small difference in cost for a company to switch from the plastic to a more sustainable. But are there other barriers that you hear about as you talk with different companies?

**Melinda Lee (23:05)**

Yeah, absolutely. So the reason why we have two products, one being completely plastic -free and one with some plastic. So the second product has 54 % less plastic. When we were going out there selling this completely plastic -free product, which is very aligned with our mission, we felt was the best product out there, the difficulty in adopting the product is that the entire pharmacy system and really all of Pharma has adopted this round circular shape.

All of the automation machines, the pill filling machines, everything has been built around this cylindrical shape. And so because our first product, the fill box, is a box shape, it was really hard to try and fit this into existing systems. And we could talk about this green vision of if we think 10 years out, we could come up with a better system that would be adapted to the square box, but, you know, it was just so hard. And so it was a huge learning experience for me and my co -founder to be like, we cannot force an entire system that has invested billions into the cylindrical shape form to change for us. So we have to adapt to it. And so that was how we developed the second product, the Tully Tube. And this is a cylindrical paper -based bottle. And then we patented this adapter. We call it the cap adapter that adapts to the paper bottle bottom and it can hold the cap onto it.

So now it's a cylindrical shape. It is mostly paper -based. And now we can fit into existing sort of the existing infrastructure. So definitely infrastructure. I think even when these companies are very sustainably driven and there are many champions within the organizations that want to see this done, we had to learn to also fit into the current infrastructure.

**Brendan (24:54)**

Yeah, I wasn't aware about most organizations having a similar process in place that would require a specific type of shape. So that's pretty fascinating. So obviously, we started this episode talking about the environmental impacts of plastic in this case, in pill bottles in particular, and not being recycled and ending up in landfills and everywhere else.

Beyond sort of the environmental impact, are there other benefits for healthcare organizations or pharmacies adopting more sustainable approaches like this?

**Melinda Lee (25:36)**

So that's a great question. So specifically for our product, we knew that sustainability is a great talking point, but it's never, it's going to be very hard for someone to open their wallet or purse strings to just pay for sustainability. Something that we learned even as a consumer myself, when I, you know, I'm huge environmentalist and you know, when I purchase a sustainable product, it has to perform equally if not better than whatever that's on the market for me to feel comfortable purchasing it. Sometimes I'm willing to sacrifice a little bit in terms of function for sustainability. And so for us, the value add for our product, because it's paper -based, you're able to completely brand and print on it. And so, you know, versus now, right? Like plastic pill

bottles, they're always orange. Sometimes if you go to a fun pharmacy, you might get a green bottle or a blue bottle, but that really is the primary difference. And so for us sort of as an additional value proposition to these large organizations and pharmacies is that you would be able to brand onto it. Yeah, and sort of really create that experience that you want, right? Because every pharmaceutical company and every pharmacy, there is a brand story that they're trying to tell, and they're investing a lot of money in their website and on ads. But really, your customer, the the thing that they're actually holding is the packaging that you dispense it in. And that's the actual product that they're interacting with every single day. And it's sitting in a very prominent location in their home, right? It's in their kitchen. They see it every single day. Would you want your brand to be represented on top of an orange plastic pill bottle, or would you like it to be better branded in this sustainable, beautiful, sturdy paper packaging product? So those are sort of the value proposition that we provide to... these larger organizations in addition to the sustainability, the less CO2 emissions and the less plastic, the more recyclability.

**Brendan (27:39)**

Yeah, so lots of benefits there. So one of the things I think that consistently comes up really in any conversation in light of COVID is sort of, everything that we saw impacted as a result of COVID, right? Obviously everything from a social standpoint, learning, work, but one of the things that we consistently saw on the news all the time was, sort of a shortage of materials or an overabundance of waste created during that period of time because of the need for so much more personal protective equipment. So I'm curious, we're talking about solutions around pill bottles right here, but are there ways that sustainable options like yours or maybe others that you've heard about can help meet the demands of potentially a future pandemic?

**Melinda Lee (28:36)**

That's a great question. And I know that I'm CEO of a startup, but it may be a question above my pay grade. No. Yeah, I mean, the pandemic. So our company was born out of the pandemic. And when me and my co-founders started building this company, we had really, really believed in this recircular, reusable model. We really wanted it to be a reusable model. But during COVID was when we learned the lesson very quickly that a reusable model would be very hard to implement because of how the healthcare system consumes its products. And so, you know, going after, choosing materials that were much more sustainable, like paper or aluminum or steel, you know, was the route for us versus choosing something that's going to require us to recollect and clean and redistribute it.

This is just the learning that we got from COVID. So to a certain extent, we are very grateful for what we learned during the pandemic because we knew that a reusable system was going to be a very, very difficult thing to implement within the healthcare system. I'm not to say that it's impossible. It's just that of all the industries out there, right, where we have food, we have fashion, we have, you know, there are all these other industries that, you know, have different, you know, profit structures and reusability in those markets are really difficult, to try that in healthcare when there's so many additional constraints is even harder. Yeah, so that's sort of my answer for that.

**Brendan (30:12)**

Well played. You are the CEO of a startup that is tackling a very important piece of the pie. You don't have to be the CEO that tackles the whole problem, right? Like you're leaving some room for somebody else, right? To create some solves or solutions for other environmental impacts of the healthcare system. I wanted to go back to the the status shared earlier around the 3,500 tons of plastic waste that's produced every day in the US by or by the US healthcare system. So we talked, as we talked, we talked about, you know, there is a there is a need for plastic, there, there is some solutions that you've had, or that you have, that are completely

plastic free and others that are significantly reduce plastic. I'm thinking that I'm almost going to answer my question as I go through this, but or I should say it's seeming like the hybrid approach, if you will, in terms of the ability for the U.S. health care system to eliminate all plastic is probably the more likely scenario than a world in which we are able to eliminate all plastic. But I just wanted to kind of open up for additional thoughts from you around the realities of a plastic free US healthcare system.

**Melinda Lee (31:31)**

Mm -hmm. The realities of, I love this question. Stephanie and I, is definitely possible, right? Like given the right regulations and infrastructure and reimbursement, you know, climate, it is definitely possible. But just because of how much strain the healthcare system is under, right? Everyone is just clamoring for, you know, very thin slice of the margin, which is hard to believe for most people. I know in your podcast, you sort of discussed sort of costs, right? In healthcare, you know, how sometimes people blame one party for or the other for the high cost of prescriptions or healthcare costs, but it's really a systemic problem. And because of that, it's really, really hard to implement certain very ambitious goals like being completely plastic free. I think the goal in the next 10 years, it is definitely achievable to be less plastic, right? Like that is absolutely achievable. I think if we go to anyone in healthcare and say, you know, could your particular department or your particular specialty be completely plastic free? It's going to be... nearly impossible just because of the need for sterility, single use, and the costs in that space. But could you use less plastic? That definitely is going to be a resounding yes. I think by placing the false choice of like, either we go completely plastic free or we're just going to use as much plastic because there's nothing we can do about it anyway is really where we've sort of gotten stuck with. Like I think currently this is sort of the climate because it's like, well, we can't get rid of some of this plastic because we need it to be sterile and single use. It's sort of given this like free pass to the healthcare system to be like, well, because of that, we're just gonna use as much plastic and use as much single use gloves as possible. You know, like there's like no consideration for it just because we are quote unquote healthcare. So just being more mindful about it as possible.

And perhaps this answers the earlier question about COVID pandemic of like other, you know, reducing the single use materials. We were using so many gloves and I would say Malaysia as a country really, really benefited from the high single use gloves situation in the US. But in a lot of other countries, administering vaccines does not require gloves, right? Like what is the purpose of gloves when you are administering a vaccine? Like the glove is not protecting anybody from.

It's just skin touching on skin. But in the US, it's very commonplace. As a consumer, you would be shocked to go to a pharmacy or a clinic and the physician or whoever was administering the vaccine was not wearing a pair of gloves. It gives a false sense of security. And for that 10 second or even less of administering the vaccine, we're going through a ton of ways just in gloves, just in rubber gloves or nitrile gloves. So that is one concrete example of sort of...

waste reduction. Yeah, and do we absolutely have to generate waste in that scenario? It's a bad question, right? And that's a question that I think healthcare providers and healthcare systems in general should be constantly asking themselves.

**Brendan (34:44)**

Yeah, that's a great point. And back to the sort of what regulations and policies are we taking sort of a worldly view and thinking about, you know, how are other countries doing it? Are there best practices we can adopt? I think is a, you know, all great points. And I love that you're optimistic about, you know, I was, you know, it sounds like it's possible, right? Which is great. And I think hopefully there are you know, individuals, organizations that listen to this podcast.

And it may be peaks or inches to say, Hey, maybe there is something I can do about it. Maybe it is something I can reach out to Melinda about and learn more about, you know, the solutions that, that her company has created, or maybe even there's something, you know, small than an individual can do. I love to end with the last question to you really around and speaking directly to people that are listening to this podcast and in particular people or in organizations or in positions where they can make decisions about ways in which they can make their companies more sustainable. So I'll leave it to you to sort of give your elevator pitch, if you will, for why a pharmaceutical healthcare other company should partner with your organization to.

**Melinda Lee (36:06)**

Yeah, I think you've given me such a beautiful stage to talk about our product and our company. And I feel like nearly the last 30 minutes, I've just been talking about products. So I will actually take this opportunity to not talk about product and talk about sort of how I think organizations should go about thinking about sustainability. Of course, sustainability is a great marketing talking point, right? It is wonderful to add into marketing decks. It's wonderful to add onto your website for the sustainability.

I think for organizations, for decision makers, I understand most people understand there are cost constraints and there's bottom line to look after. Sustainability is wonderful, but you cannot sacrifice profit just for sustainability. Most people would understand that. But to really, for these decision makers to really reflect upon the legacy that they would like to leave, right?

Think about the first person who decided to introduce a plastic pill bottle and sort of that round circular shape that has gone on to inform these larger infrastructure decisions that when you make a sustainable decision and you make a change to one tiny piece of your organization's either supply chain or how they utilize just current products within the organization.

That is a small ripple that is going to set an example for others in the organization that it can't be done. And it may go on to sort of create a lasting change and a legacy for creating a better company. And I think a lot of these decision makers who are listening to this podcast sit in companies that are in healthcare. And yes, protecting human life is very, very important. We also have to think of the broader public health landscape.

And so just think of sort of the legacy that they would like to leave in the position that they're in. Defending profit and bottom line is incredibly important for any decision maker, any executive, but to also think about how that sort of informs the legacy that they would leave in terms of human health and also planetary health.

**Brendan (38:24)**

I think that's a fantastic point to end on, thinking about the legacy that each of us can leave behind. Melinda, I can't thank you enough for this enlightening conversation. I certainly have come away from it with a lot to consider, both in my role in the health care industry and as a consumer of health care. I'm sure our listeners have, as well..

**Melinda Lee (38:50)**

Absolutely. It's been an absolute pleasure speaking with you, Brendan. I'm so glad you invited me onto this podcast and, you know, being able to talk about this is near and dear to my heart. So thank you so much.

**Brendan (39:03)**

From pill jars to health facilities, plastic waste poses a significant challenge to the health of the environment. At AstraZeneca, we believe our future depends on healthy people, a healthy society and a healthy planet – and that starts by understanding the impact our decisions have

on all three because they are interconnected. We unpacked quite a bit today and I'm encouraged by the efforts of Melinda and others in the sustainable packaging field to make a difference. We've certainly got a big task ahead of us – all of us – but when we're armed with knowledge, we can achieve big things.

Thanks again for joining us on *That's Understandable*. For more information about today's episode and guest, be sure to check the show notes.

Until next time, be well, be healthy. Be understanding.