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In this episode, Taren Grom, Editor-in-Chief of PharmaVOICE magazine meets with Valerie Palmieri, President and CEO, Aspira Women's Health.

Taren: Valerie, welcome to the WoW podcast program.

Valerie: Thank you Taren, glad to be here.

Taren: Valerie, you are running a really unique company, one that is focused on women's health. Tell me about this experience and what it's been like for you.

Valerie: Wow. Well, number one, women's health has been a underserved population in terms of dollars, resource dollars as well as specifically focused on women's health as well as the different race and ethnicities that are included. So the experience has been amazing as a woman, as a mother, as an aunt and, quite frankly, a woman's health activist that this is a dream come true to remove a 40-year-old standard of care.

Taren: I love it. We talk about women's health as though it's so laid back in the days when it was secret, but we really need to be shining a light on the different healthcare needs of women and they are different men.

Valerie: Absolutely. Absolutely. I think that if you – especially if you're looking at the pharma trials you see that for a long time the majority of the recipients were males – Caucasian males – and now we are really moving to I think fast pacing post-COVID a somewhat of a I would say awakening that we are not a homogenous society. Gender is important as well as race and ethnicity is very important. So I think all of this is waking us up to have a better end-product in terms of diagnostics and in terms of overall just managing that disease as quickly as you can in the process.

Taren: I couldn't agree with you more, so if there was any silver lining from all of this COVID tragedy that is one of the silver linings that we're seeing come out. You led the transition of the company to the commercialization of its market leading products today and now your folks has done a company's product expansion pipeline moving into the benign pelvic mass management and endometriosis. Tell me about the transition and what does the product expansion mean in terms of operations for the organization.

Valerie: So in terms of the transition where we transitioned the company's name in June from Vermillion to Aspira Women's Health as we wanted to call out center stage that we are a



women's health company. You'll see a lot of companies out there that have names that could be where the name is hidden. We really wanted to put first and foremost women's health as our middle name.

Number two is we're focused on diseases that require a surgical diagnosis. The first disease we focused on was ovarian cancer. So you think about it there are 20 million women in the US – and this is US stats only – that have a pelvic mass of some sort, but only 22,000 that have ovarian cancer.

So over the course of the 10 years this company with the help of Johns Hopkins and other corporate sponsors we have created the first FDA cleared algorithm specific for ovarian cancer. And when we were testing – and we've tested over it's got to be now over 120,000 women to date – what we saw is the most common disease that we're seeing is endometriosis. Of all the benign diseases that you see in the pelvic cavity, endometriosis is the most common. So as we were ruling in ovarian cancer, we were actually ruling out endometriosis and now we've developed an algorithm, which we will be submitting for breakthrough device, which will be a non-invasive blood test, simple blood test to aid in the diagnosis of endometriosis, which now requires an invasive surgical procedure.

So our goal is to bring non-invasive medicine that will just require a simple blood test to give the doctors and patients insight to the disease, whether it's ovarian cancer or whether it's endometriosis, so that we can reduce the time to treat and get that patient to the right doctor and to the right treatment course as quickly as possible.

Taren: Which is critical, right because any delay in ovarian cancer just increases the negative not the positive effects of cancer, the negative aspects of the cancer because it can be so quick moving, correct?

Valerie: Absolutely. So right now today, and here's some stats, and I'm a numbers person, so one in two women die of ovarian cancer. So the diagnosis of ovarian cancer, the mortality rate depending on the population that you look at can be anywhere from I want to say 60% to over 50%. In fact, overall when you look at all races it's about 52, 53%. So the mortality rate is extremely high and if you compare that to any other diseases which are gender specific, let's say prostate cancer, testicular cancer, breast cancer, those mortality of those diseases are I want to say in the 10 to 20% range versus greater than 50% range. So this is the only gender-specific cancer with greater than a 50% mortality rate, so number one.

Number two is what you have is a situation that even when a patient is diagnosed to your point earlier, it's diagnosed at late stage and so greater than 65% of patients are found late stage. Hence, that's why the mortality rate is so high. So the goal is that solving for this is really finding a test that can find the cancer at early stage when a patient can actually fight the fight and early stage meaning that you have a survival rate of 75 to 92% versus a mortality rate of let's just say 50 to 65% and it's our goal, our end in mind is to find the cancer when it's early when it can actually be beaten and the patient can survive.



Taren: That's awesome. And so keeping that in mind, is this a test that then maybe it could be given to women during their yearly mammogram, during their yearly screening or their health test so that – it's not something you go in and check for ovarian cancer for every yearly checkup, but this is something that could counter that, yes?

Valerie: Well, it's not a screening test in the sense that a patient is asymptomatic, so let me kind of compare it to a pap smear. Pap smear is for cervical cancer and the patient goes in annually and gets a pap smear that's between a specific age group. So this is a test where you're trying to find a very low number of women "you can almost consider a rare disease", only 22,000 women have ovarian cancer. So I don't think there'll be a day where our healthcare system will support a screening test of 150 million women to find 22,000, but I do think that where we are focused on is an enriched cohort. And what I mean by that is those patients who either have a mass – which 1 in 5 women do – so they have a mass and the doctor needs to discern what is the risk of that mass and other side of this is, and this is in our portfolio as you talked about earlier, called ova inherit is those patients that are genetically predisposed.

So today in the US 1 in 400 women are what we consider hereditary breast, ovarian cancer HBOC-positive, so 1 in 400 women. If a woman has one of those genes, the risk of cancer is increased tremendously, and in fact of all cancers, 20 to 30% of ovarian cancer patients have a gene. So they have some indicator versus other cancers that genetic predisposition is only 5 to 10% while with ovarian cancer it can be up to 20 to 30%. So it's very, very key when you look at ovarian cancer, we want to focus on women that are genetically predisposed or focus on women who had some type of pelvic mass. That answer your question?

Taren: Yes. It makes it very clear. Thank you so much and the numbers are really very telling. So I love that you're a numbers person because it really paints the picture in stark reality and the numbers are just devastating as you explained them. Best of luck to you on moving this forward and let's hope that we can get to those women much earlier to save more lives obviously. You have more than 30 years of experience in the diagnostic lab industry, what interested you about this area of the pharmaceutical life sciences space and then I'd love to hear your take on what some of the major trends are that you think are redefining this space and where are some of the greatest opportunities right now?

Valerie: So you mean like what drove me to be a scientist or what drove me to this particular company?

Taren: So let's start with what drove you into the science part of the diagnostic space?

Valerie: I would say that I was always a kid that was always trying to figure out the root cause of how things worked and whether it was growing plants from a seed in a Petri dish in my bedroom, to I wanted a microscope at like 8 years old. So always science is the heart of who I am, and so that kind of drives me being a data person and also understanding the 5Ws – who, what, where, why and how of everything. I think going forward I would say I came from a poor family, first one that went to college and wanted to really figure out okay, what is making the human body tick from almost a laboratory perspective.





So if everyone understands – and not everyone does understand this – is that 70 to 80% of decisions that are made to drive an individual's diagnosis are made from their body fluids, their blood, their urine. It could be a cerebrospinal fluid, so understanding those components from a clinical perspective is what kind of drove me into this field because that's really the root cause of understanding disease before it shows up or understanding someone's risk.

So that fast forward, I worked at several large hospitals and then I became part of the startup that was a spin off out of Sloan Kettering. That startup, we were the first to offer PSA testing throughout the country, first to offer CA125 which PSA is for prostate screening, CA125 is actually for occurrence monitoring for ovarian cancer.

So I spent my entire career really understanding that laboratory offering and how we can make a difference, and I do think during COVID laboratory diagnostics have had a renaissance because everyone I think is becoming almost common knowledge – at least it is in my family because my kids are in Boston and Brooklyn – what's your COVID results and understanding if you had a work get together 'I got to have my COVID test before I go.' 'I got to have my COVID my test after we go.' So laboratory diagnostics I think has taken a center stage.

And then fast forward, you're talking about the trend. So I do think that people are wakening up to say laboratory results are not just a nicety; they're a necessity, especially during this COVID period of time. I think people will be much likely to get flu vaccinations versus the past where you see older people get flu vaccinations. I think getting vaccinated – although the vaccine is controversial right now, but I think that as it takes hold, vaccinations will become more of a mainstay instead of people walking away from vaccinations. And I think the trend also is consumers becoming empowered. I think being consumers now you'll see a huge splurge in terms of home testing for COVID testing. I think there will be a splurge into more home testing, whether it's with your saliva, making it easier to do a blood collection from a finger stick device. So I do think that that will be a future trend and I think last but not least it's going to be that the consumers because it's high deductible will want to take more of a front seat with understanding what lab is running the test, what's the quality of that lab, what's the cost of that, what's the value of that.

So I think value-based medicine, although was always a cliché word, I think it truly will take front center stage in terms of the consumer understanding the value, the provider understanding the value, and then the payer understanding the value. And I think those companies that embrace value-based medicine will actually be ahead of the game versus trailing behind.

I hope that – that was a multifaceted answer, but I hope that covered all the bases.

Taren: That was great. Those are great trends to be watching. So thank you for that. You noted just a minute ago that you had been part of other startup. So you served as CEO President of a couple of different startups, what attracts you to these types of organizations? What gets your jets running on a startup?



Valerie: Oh my goodness, Taren. I would say that – well, a couple of things. One is just the wide stage, being pioneer. I look at the time – this is just my philosophy in life is I look at my time on this planet as being limited, and so a startup you really have to dig deep in terms of who you are, what drives you and I've had the opportunity, this is like my third startup to be part of organizations that really are whys, like big whys to me in terms of why I want to figure something out and bringing a team along that believes with me in figuring out this why.

I think it must be part of my internal profile in terms of personality, but it's figuring out the whys. And I also think that it's kind of how you're – it's like I'm part of this group of women called Springboard Enterprises and there's about 800 of us and we've raised over \$20 billion over the last 20 years and I've been part of the organization since 2013.

And they actually did a survey of they took the – at that time I think there were 600 of us, this was a few years ago, but they asked what makes us different, like what makes us tick – and this was Korn Ferry – and they compared our personalities very similar to a male CEO in terms of being driven like a male CEO, but actually from another viewpoint being more agile, that as a woman we can multitask better and also be more agile in terms of driving in a high change environment. So I think that's probably those are unique skills that I think in a startup you need to have those skills, as well as you have to be driven by the why.

Taren: I think that's fascinating, and I don't know that we needed Korn Ferry to tell us that women have those skills, but I'm glad that it's validated, right.

Valerie: That's right. That's right. Pretty funny.

Taren: For your efforts, speaking of Springboard, you were recognized as one of the top 10 entrepreneurs. What did that recognition mean to you?

Valerie: Oh, my goodness. Well, it was really an unbelievable recognition. I got the opportunity to actually visit the White House. So it's sort of like they go around the country and now they actually have gone global. They go to Australia. They have a movement in Australia, so they go worldwide and they seek out it's almost like American Idol like where you go and pitch your idea to a group of thought leaders from all walks of life, the business, investment banks, payers, and they go to all the cities in the country and then they probably interview close to 100 different companies, and they pick 10 in the US and they also pick a number in Australia, for example, and they bring you in and they coach and mentor you to lift your idea.

And I have to say of my experiences during my career, it has been one of the most gratifying because it's a nonprofit that has been really built to lift women, a nonprofit that Kay Koplovitz who she basically was one of the founders of USA Networks, which she took the technology out of NASA and created USA Networks and she decided that she want to spend her career lifting women and investing in women and she built this organization and it's just it's been tremendous. In fact, we just lifted – just to kind of plug them, there's a women's health coalition that my company is part of and we just kicked this off in the last 12 months and we started with a few companies and we're up to 85 and we're looking to focus on all the different



diseases in terms of autoimmune, oncology, gyn, reproductive medicine that are specific to women's health.

So it's really a movement into its own, but it's also a it's a group of women that are paying back to other women to lift them. So I serve on the life science council there, as well as I serve on this women's health coalition. So my goal is to get this company lifted and change the standard of care and then serve from I would say philanthropic perspective on the boards of these companies.

Taren: Bravo to you and bravo to them. What a great thing to be a part of. I encourage our listeners to go check it out and see where they might get involved as well because I think what great work you all are doing. That's fantastic. Valerie, how would you describe yourself as a leader since you have been recognized as one of the top entrepreneurs? That doesn't come without having some chops. So how would you describe yourself as a leader?

Valerie: I would say that I am a consensus leader, meaning I hire people that are stronger than me around me for my cabinet. I look at it very similar to as a president would look at their job. So I bring people to my cabinet that are stronger than me. I am also a leader that leads by example, so servant leadership is very important. There's nothing that I would not do in the organization that I would expect of them, number two. So I think number one is bring people smarter than you because they actually drive you and you drive them. Number two is be of servant leader and always willing to roll up your sleeves in terms of really removing obstacles and ensuring that they are flying as high as they can fly and you let's them go as thoroughbreds.

And then number three is as a leader is being letting data manage. I'm very methodical in terms of the chess game and understanding you measure what you manage and you manage what you measure. So understanding your data, understanding as a – especially I think in a small company you have to sometimes be at 30,000 feet and then you got to be – you got to understand what it takes to block and tackle. So I think those are really the three things that I would say is bringing people stronger than you, being a servant leader as well as letting data drive how you make decisions versus because time is your rarest commodity as a startup and even as a business and especially when you're in healthcare dealing with the devastating disease like ovarian cancer is all about time. It's not the capital, it's really the time and time is of essence. Thirty-eight women actually died, they have ovarian cancer and that's something that I think about everyday.

Taren: Again, I'm so moved by your purpose and your mission and I love your three areas of leadership. I think they are right on point and something that we can all learn from. So thank you so much for sharing that. In terms of what you're facing as a leader right now, obviously COVID is a huge challenge, but aside from that, what are some of the challenges you're facing? Is it keeping your teams motivated during this time as they're working virtually? I know that's tied to COVID, but aside from the actual COVID disease itself what are some of the challenges you're facing?



Valerie: I would probably say that if you ask me this question last March when COVID was starting, middle of March is when we thought pick up, I was so specifically to our company I was worried because elected surgeries are put on hold because they were saving all the ventilators for the COVID patients. Wow, here are companies just coming out. We just we're in high growth mode. A lot of our sales team members are less than a year on the staff. So I thought what do we have to furlough? What will we need to do? We decided to actually with my CFO, we decided to stay the course because we're in high growth mode and I have to say that although this was a challenge it became an opportunity because our company fared well through COVID.

We saw our technology being used to help triage patients' real time so doctors would run our blood tests and they know for patient with low risk they could push that surgery off. Initially they could not, they would still proceed with the surgery, but they would basically delay the surgery and tell a patient with 90% certainty that there's a high chance this mass is negative and we can wait 60 days when let's say if COVID gets back to – things go back to somewhat normalcy. On the other side of a patient with high risk, the test actually was used to support taking a patient to the OR.

So I think of things that were challenges actually we cease the moment as an agile team and we embraced the disruption of COVID. I would say that the second thing that we did was survey the employees because a lot of employees weren't used to working virtually. Salespeople are used to working virtually, but my billing team wasn't used to working virtually, so what did we do to arm them with the right tools? So one of the things that we did proactively is we surveyed them and we found out that communication although we are communicating weekly at the time, we really want communication to be more one on one and they were used to just meeting somebody in the cafeteria or at the water cooler and talking with their boss or with their colleagues. So we did implement a tool called 15/5 – I'm plugging another company here I know, but I'm really a believer in it so it's a simple app and it really asks some of the I call subtle things, but how are you feeling today. When did somebody ask how you're feeling like and you know that if the pulse is a 3 or a 2, someone's had a bad week and it could be more personal not the company, but I think that as challenges I think we have to look at the whole person during COVID.

I think COVID is and though it may not be hitting you physically, I think it could be having an impact on us as a population mentally and I think that if anything it's embracing that whole person and that mindfulness piece of COVID. So I think the challenges are ensuring that we value women's health because being a women's health company is we give people the time whether it's managing their virtual schooling or managing their elder care, their elder mom or their dad or relatives and that we take care of the whole person. So I think that it's an opportunity, it's a challenge, but I think that as an organization whether you're small or large, I think that's the most important challenge as we go through this COVID.

Taren: Yeah. I couldn't agree with you more, so kudos to you and to your team for managing through some very difficult times. As we move towards the end of our talk today, tell me is there anything you know now that you wish you had known as you were moving up the ranks?



Valerie: Anything I know now that I wished I knew. I would probably say the time – I know it's like – I hate to be so fixated on time, but I would say that with time it takes to get things done and I probably, there's a lot of things that we had to move like guidelines which is we have to move medical colleges to believe in our tests and so the time it takes for that lobbying and it's not so much lobbying, but creating the data to support the test and the time it takes to do that is enormous and the things you don't control outside of your company, you just don't control that timeframe. So I think giving yourself time and not having unrealistic goals on how long it takes to move those rocks.

The second thing I think is really not – even though things take time, is knowing that these things – you're moving mountains and when you move mountains or things that are tough, it just takes longer. And making sure your investors understand how long things take. I think that time is probably our biggest asset, but it's also is the biggest enemy and making sure that you quantify or appreciate how long things take I think is really important and how you communicate that because it's all about the quality of getting across the goal line and how long it takes. So I think time is I would probably say I always want things quicker and I just need to appreciate how long things take.

Taren: I think you're not alone there, so that's great. And finally, tell me about an accomplishment or a wow moment that shaped your career.

Valerie: A wow moment that shapes my career, wow. I mean there's many things. There's like many of them that shapes my career. I'd probably say just getting into Springboard shaped my career in terms of I think people think you have to be part of a large Fortune 100 group company to move mountains. You have to be supported by a multinational company to really make a difference and I think that with Springboard, the influence that this organization has with sponsors like Dell and others, they really – it just put me into a whole another light although working for very large companies and working for small companies it puts you into a whole another light in terms of connection. So I think that was an unbelievable opportunity.

I think second is getting our technology and guidelines in 2016 and most recently we got into eviCore guidelines. I think that having a technology that you're changing the standard of care that's been there for 40 years, so I call it a leave a legacy moment, getting a technology into guidelines and really changing the way this disease is managed for women was truly yeah, I want to say a moment in my career that I'd like to – I don't want to say write in my obituary, but I'd like to write into my obituary.

Taren: Well, let's not write that obituary too soon. I want to thank you so much for sharing your tremendous insights on such a devastating disease for women and what you're doing to move mountains is truly inspirational. So thank you so much for being part of our WoW podcast program.

Valerie: Thank you, Taren. I really appreciate it. I appreciate your support and the time to dig into our company and what we're working on. I appreciate it.



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