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VOICEOVER:

Welcome to ASA's Central Line, the official podcast series of the American Society of Anesthesiologists, edited by Dr. Adam Striker.

DR. ADAM STRIKER (HOST):

Welcome to Central Line. I'm Dr. Adam Striker, your editor and host. Today, we're going to find out what the future holds for anesthesiology. Specifically, we're talking about the special supplemental issue of The Monitor, which is all about the future of health care and our specialty. I spoke with three contributors to get an idea of what the future might look like from factors that will shape finances in 2030, to how considerations around health equity will impact our practices, to whether our future is bright or dystopian.

Dr. Warren Sandberg, Professor of Anesthesiology at Vanderbilt School of Medicine, Chairman of the Department of Anesthesiology at Vanderbilt Medical Center and Chief of Staff at Vanderbilt University Adult Hospital, joined me to share his thoughts on what anesthesiology might look like in the year 2030. Dr. Sandberg co-wrote an article for the issue that lays out some of the innovations, disruptions and stabilizing factors that could be headed our way. I'm looking forward to hearing more.

So welcome to the show, Dr. Sandberg.

DR. WARREN SANDBERG:

Thank you.

DR. STRIKER:

In your article, you suggest that unless we implement a disruptive strategy, anesthesia practices in 2030 are more likely to look like they do today than some

dystopian version of medicine we can't imagine yet. What forces are at play now that act to stabilize the specialty?

DR. SANDBERG:

Thank you for that question, Dr. Striker. Before we go any further, let's establish the definition of disruption that we can all agree upon, which is not the one I think most people think about. So when you talked about implementing a disruptive strategy, that's not something that the typical industry leader sets about doing because in fact, disruption as defined by Christensen and his original definition of the term is an event which happens to an industry leader by an upstart that basically knocks the industry leader off their perch and frequently basically completely undoes their business model. So, disruption is not something that we look forward to. In fact, disruption is usually what happens to former champions of industry or champions of a specialty.

Now, when I said in the beginning of the article that our specialty was likely to look a lot in 2030 like it does today, what I was really focusing on were some of the positive aspects of anesthesiology that keeps it constant in a good way, meaning that we don't tend to take unnecessary risks. We're definitely conservative with patient safety and, and patient quality topics. We have a care team model and a culture of personal attendance and vigilance that our specialty was built upon. Personal patient care is a part of our culture from the beginning of our education, and that's a stabilizing force.

I think almost equally important is that there are regulatory frameworks around the practice of anesthesiology and especially around anesthesiology reimbursement in the United States that can seem to be stabilizing, but I think they're also a risk. But they are practically written in stone between our, our largest payer and anesthesiology practices. The seven steps of medical direction, for example, or the conditions of medical direction versus supervision and, and the rules by which we're reimbursed, which also heavily influence how anesthesiology is practiced.

DR. STRIKER:

But there are risks of disruption. What factors are at play now that could alter the equation and reshape the future?

DR. SANDBERG:

Yeah, I, I think there are definitely are risks to disruption, and it's topical and timely now that we are entering another wave of, of COVID in the United States because one of the things that we're hearing is that clinicians of all kinds, anesthesiologists and other (sic) group to provide anesthesia care, in addition to nurses and physicians up and down the house of medicine are talking about leaving medicine. And that will leave us with a real shortfall of providers of all types. And markets tend to respond under the conditions of scarcity by driving up the price.

I think that anesthesiology is a very pricey specialty, frankly, and we're on the precipice of not having enough providers, which creates both an opportunity for conflict and it also drives the payers to be looking for ways to provide the service at a lower cost. And this is a classical setup for disruption in the Christensen construct, where the market leaders are expensive and the people who are just trying to provide a commodity service to a low end of the market are looking for something that is good enough. And that, I think is a risk for us in anesthesiology that one of those upstarts, not any kind of anesthesia provided that we're used to seeing now, but a piece of technology, a robot, for example, could be good enough for a major keeper of the kingdom, if you will. And that could open the door for disruption to anesthesiology as it's practiced in the United States, meaning anesthesiology with a single person or persons in attendance of individual patients.

DR. STRIKER:

What about external disrupters? I assume those are potentially risky as well.

DR. SANDBERG:

Absolutely. They're interlinked. So, if in addition to basically creating an opportunity for a lower capability technology that people might be willing to accept, and I don't mean anesthesiologists, I mean, the customers or the people who basically set the payment rules. In addition to the entry of a lower capability technology, payers are basically looking for ways to get more mileage out of the workforce to get their costs down. And those same rules for reimbursement that seem to create a stabilizing force around anesthesiology, people need to understand are not actually something that was legislated. Those, those could be changed by a rulemaking activity. And I, and I think we as a specialty have seen that in action with the Opt Out Rule, for example, or the moves in the Veterans Administration to make advanced practice nurses independent.

And I think that the unintended consequence of that quest for lowering costs is that some key components of the way we practice now, the, the care team model in which multiple care team members bring their skill sets to the care of an individual patient could actually just be prohibited. And that is a major external disruptor that would be, I think, quite detrimental to our patients.

DR. STRIKER:

Well, you mentioned that, you know, we're at risk for disruption right now or at least alluded to that. Where are innovations coming from exactly? And if not now, where might they come from in the future?

DR. SANDBERG:

So, people talk a lot about artificial intelligence, which I, I, I'm going to go out on a limb here and give a personal opinion that I think AI is basically on the first, first peak of the Gartner Hype Cycle. And there's a lot more marketing going on around AI than there actually is things that are going to be effective. And I, I'm reminded of a fantastic talk that Steve Schaffer gave about AI and anesthesiology, in which he talked about some of the amazing and breathtaking breakthroughs that have happened in the AI space. And yet, you know, simple robots can't put, you know, a spoonful of baby food into the mouth of a doll, but a three year old baby can feed its 18 month old brethren.

So, I think that, that the AI space is undergoing breathtaking development and yet is probably not a risk for us at the moment because so much of what we do in the operating room depends on manual dexterity, manual dexterity under conditions of incredible challenge and uncertainty. And then we couple that with our personalities as humans and our ability to actually connect with and provide comfort to patients. And those are two things that AI or technology are just not going to replace. And as long as we remember our humanistic component, the, the fact that we are healers first and keep that front and center, I think that there will always be a place for us and we're unlike, that is unlikely to be disrupted by technology.

DR. STRIKER:

Well, how can we ensure anesthesiology is in a good position by the year 2030? I mean, what should we be doing at the level of individual providers or practitioners, groups or, or the Society at large, just to make sure that we assure that the future of the specialty is bright and there for those that are, are younger and in the field right now?

DR. SANDBERG:

Yeah, I'm quite optimistic, actually. You know, I've been in, in anesthesiology now for since 1993 if you count my medical student days and, and the specialty is quite recognizable to me in 2021. And I have a lot of confidence that because of some of those positive attributes of anesthesiologists that I mentioned that we will be thriving in 2030.

But I think that there are a few things we need to do to make sure of that. First of all, we need to take whatever steps are necessary to assure that we don't have a workforce crisis. And that means honestly, that we will probably have to embrace technologies that come along that spread our capacity over more lives. And so, I think that it goes against our, our conservative nature to actually welcome and then very carefully monitor and curate new technologies that come into our space. But I think we need to be ready for that.

It's also important that we not leave a piece of our business uncovered. So, you know, underserved parts of the nation, underserved parts of the hospital, underserved parts of our population, they need an anesthesiologist. And I think that that means that we're going to have to extend ourselves to cover that work. I think it's reasonable to expect that we would be recognized for that and be reimbursed for that. But I do think that we're going to need to basically be the first mover and be present when needed first, and, and get recognized.

I think we need to basically, as I said, be the first mover. And in my own practice and my institution, my department has led out basically doing things that need to be done that we've recognized and frequently then the recognition of that follows. By that, I mean also material support to the department. So, I think that as long as they maintain that positive attitude and never leave a piece of our work that needs to be done uncovered, we will be fine.

DR. STRIKER:

Well, and the other piece of that is to make sure that reasonably priced anesthesia care is available to all those who need it. And I assume that, you know, as we're talking about things that all of us can do, or as a specialty we need to do as we go forward. I imagine there's going to be some, well, say resistance because as you mentioned, you recognize the specialty from when you started training. There's going to be those that might say, you know, I'll, I'll make these changes, but then I'm not going to recognize it. And so why would I support these changes? But I am I

wrong to say that it's that, that second piece, the expectation of reasonably priced anesthesia care for everyone who will need it needs to come into, into the fold when you're debating with yourself about what I need to do to help, you know, move the specialty forward, I guess.

DR. SANDBERG:

Yeah. Don't get me wrong, I don't think we're in any way overpriced. The only thing I'm saying is that especially if we, if we come into a real personnel squeeze and I think that's a risk, somebody's going to do that work. You know, I think everybody listening to the call is, is thinking about the scope of practice conflicts between anesthesiologists and nurse anesthetists and wondering about the role of anesthesiology assistants. But I think actually, all three role groups are, are kind of in the same position in the sense that if as a, as a group together, we can't figure out how to provide the care to everybody who needs it, then society will figure out what to do about that without us.

And so I think that when we're talking about recognition, we're talking about reimbursement, we're talking about compensation, we're talking about fairness, we're talking about the establishment of value, I'm suggesting that looking at only one side of that equation and not making sure that we accept our responsibility as members of our community, community of physicians, community of healers, community of citizens, if we don't recognize and, and respond to that responsibility, somebody will take it away from us. And, you know, we've had a social compact basically for a century in the United States, that physicians would be given a modicum of respect. They would be given appropriate reimbursement and they would be allowed to self-regulate in exchange for taking care of the population. And we need to remember that to have those three prerogatives that I just described, we have to take care of the population and when we don't, other people will.

DR. STRIKER:

Well, in addition to all those important points about scope of practice and, and personnel, and I was even thinking as well about just the model that you had alluded to, where someone may not believe that, you know, one person managing many more rooms than I'm used to, 8, 10 rooms just because of technology. I don't believe in that. You know, I can't get behind that. So even from a, just from a safety standpoint, not necessarily even a scope of practice standpoint. I imagine the same, the same reasoning still applies, and correct if I'm wrong, but if you believe an anesthesiologist is important to the care, the anesthetic care, any individual, these changes are going to be necessary to still have that present. You know, you may,

even if you believe that a new model may be less safe than you're used to, or isn't what you believe to be the safest way. If you believe it's important, you might, you're going to have to make those concessions.

DR. SANDBERG:

Yeah. So, so I think that, you know, the, the question of whether there needs to be an anesthesiologist involved in the care of every patient, I'll answer it this way. I'm an anesthesiologist and I work in an academic medical center and on a daily basis, I experience the value that anesthesiologists bring to the care of all of our patients, and I think that an anesthesiologist can contribute beneficially to the care of every patient who has an anesthetic in the United States. The question really comes up, does it need to be basically standing at the head of the bed from start to finish? And I think that the answer to that one is that anesthesiologists are going to contribute most effectively to the care of different groups of patients in different ways.

And so I think that, you know, certainly in my time on the Committee in Innovation, we've, we've learned about a lot of anesthetic practices that are quite novel and yet still recognizable in the United States. They are basically variations on the themes of the way we practice today. And I think that there are, there are, I can see clear pathways forward to providing the level of quality and personal attention when it's needed, and at the same time, basically keeping some patients in some cases in a looser orbit, if you will, when it's appropriate and still be able to recognize when we need to step in and rescue.

So I'm, I'm optimistic, actually, that as long as we muster the will, as long as we don't go back to our corners and sort of cover up, but actually, we come out to the middle of the arena and try to solve this problem together, that, that we will be able to provide outstanding care to all the patients who need us in models that are recognizable and mappable to, to anesthesia today.

DR. STRIKER:

Well, one last question, are you worried about some dystopian nightmare playing out, or are you confident in the future?

DR. SANDBERG:

Well, I'm not really worried and maybe I should be, but I started being worried about the future of anesthesiology, you know, in, in around 2000 or so when I took over a project at Mass General called the Operating Room of the Future Project. And for

the last 21 years, I've been kind of worried about the future of anesthesiology. And yet every year I wake up and my profession is recognizable to me as, as it was a year or so ago. And so I believe that while it's, it's wise to be concerned and it's wise to bring a concerned eye to every need for innovation, I think it's, it's also acceptable and reasonable to be confident that we will continue to demonstrate our value and we will continue to have our place providing anesthesia care to patients in the United States and around the world. So, yeah, I'm optimistic.

DR. STRIKER:

Well, thanks for joining us and sharing your thoughts. It's a fascinating article and, and certainly a lot of food for thought as we move forward and what is going to amount to a very short time. Time goes quick.

DR. SANDBERG:

Sure does. Yeah, it sure does. So I appreciate your giving me a few minutes to talk about, you know, my thoughts about the future and I appreciate the attention that went into the interview and the article.

DR. STRIKER:

Absolutely. Dr. Gordon Morewood, Professor and Chair of the Department of Anesthesiology at Temple University, joined me to discuss the future of anesthesia finances. His article is titled *Anesthesia Practice Finances, 2030*. Welcome to the show, Dr. Morewood.

DR. GORDON MOREWOOD:

Thank you, Adam.

DR. STRIKER:

First, before we look ahead. Can you talk a little bit about how we got to the place we're at now? Let's focus on the past decade specifically. Why has payment seemed more turbulent in recent years?

DR. MOREWOOD:

Sure. So, the issue is that we are reaching an inflection point in health care. The scenario we find ourselves in now really is born of the past three decades, where

there was a significant disconnect in the marketplace. Payers and the consumers of the services were completely separate. Third party payers shoveled cash into the system. Patients presented to hospitals and to, and to physicians and asked for the most advanced therapies possible. But there really was no value equation going on there, and that has led to a system which is unsustainable.

You know, Stein's Law, Herbert Stein was an economist and the head of the President's Council of Economic Advisers under Nixon and Ford and his Stein, Stein's Law, the law that he coined was that if something cannot go on forever, it will stop, which sounds overly simplistic, but it is an extremely powerful maxim in economics. Witness the, the housing crisis in 2008. What happened was there was an unsustainable mechanism for lending in housing and ultimately the entire system collapsed. We have unsustainable spending in health care, and so forces are now coming to bear that's going to change that and we can either do it in an organized fashion or ultimately the system will collapse.

So, I think the turbulence that, that providers have experienced in the marketplace is because of this shifting narrative where the payers are looking for more sustainable systems to balance their payments with the value that patient achieves from the system.

DR. STRIKER:

Well, now, as we look forward then, given that to the coming decade, to 2030, what do you see coming our way? What's the likely path for financing health care in general and specifically anesthesiology? And, and how should we respond?

DR. MOREWOOD:

I think the shift ahead is going to be what I would describe as, it's, it's a movement from paying for process to paying for a product. So up until now, physicians have become accustomed to a system where they are paid to, to touch the widget as I like to say. If you do X, Y or Z, you get X number of dollars, but they're less involved in producing the final product that the patient is interested in, which is usually feeling better in some form or fashion.

And the system in the future is going to be recalibrated so that payers push health care systems to provide products that patients value. That's going to happen through a couple of different mechanisms. One is better measurement of our outcomes and benchmarking that against payments. And the other is going to be putting more onus on the patients to make appropriate value judgments. The out-of-pocket expenses

for patients are increasing significantly, and that's by design, not by accident. And it's not simply a, a mechanism for the payers to shift the cost burden onto, onto patients. They're asking patients to make real value judgments about what they want. Does the extra MRI really provide them any value? Do they want to have this surgery or that surgery? And if they want to have surgery, do they want to have it in this hospital or that hospital? And is it worth it for them to pay another thousand dollars to have it in the hospital down the road, or should they go to their local place? And so, so those kind of consumer-based decisions are going to be driving health care finances in the future. That's something that physicians really need to be aware of.

DR. STRIKER:

So more focused on the consumer rather than the physician themselves, or both?

DR. MOREWOOD:

I think it's going to be focused on the patient, on the consumer, and physicians have to become much more aware of that.

DR. STRIKER:

And, and I'm glad you said patient. When I say consumer, I'm looking at, from the lens of the financiers, if you will. I share a lot of physician concern with, with ascribing consumer to patient, but just be specifically in terms of how the financiers look at this.

DR. MOREWOOD:

Yeah. And I sympathize that. I understand a lot of physicians have some, some recoil when they hear their, their patients described as consumers, but in the end, that's what they are. You know, we have had, I think, a very paternalistic view of our patients over the past several decades. We, we bathed in the luxury of thinking that we should make decisions for them without any regard to cost of care. But, and we think that the patients are incapable of making value judgments with regard to their care. But that really doesn't stand up to close scrutiny. Anybody who's worked in an outpatient clinic, especially in an underprivileged area, will recognize that there are patients who don't get their medications filled because they can't afford it. And yet those same patients smoke and drink alcohol and go to baseball games on the weekend. And so those individuals are making value judgments in their life and, with regard to their health care. And we, as physicians, have long ignored the idea that we need to help patients understand. We need to market our services, we need

them to understand the value of what we're trying to provide for them. We, we just assumed that that was understood by patients, but frankly, most patients don't. And so we need to get much better at that.

DR. STRIKER:

Well, you say in your article that rather than quote pondering whether physicians will be using CPT-5 and or ICD-11 for billing purposes in the future, the forward thinking practitioner and practice will need to ponder issues bigger in a much broader scope, unquote. Can you talk a bit about how you see those bigger, broader issues?

DR. MOREWOOD:

Yeah, I think for anesthesiologists, this is very important. We need to stop thinking so much about how to process the maximum number of, of procedures through our working hours and need to back up and understand that health care payers, the insurers and the patients themselves, are going to be buying products from these health care ser, systems. They're going to be buying specific procedures or, or wellness overall. And so the health care systems are going to need to understand how to engineer their systems to provide those products.

And rather than looking at very discrete aspects of our care, we need to back up, join hands with the other physicians, as well as administrators in these health care systems, and help design systems that deliver the products that patients want. We need to spend more time planning patient flows. We need to be much more engaged with identifying aspects of our care that really don't provide any value to the patients at the end of the day.

There's no one better positioned to weed out low value care from the health care system than physicians. We know what we do that doesn't help the patient. How many scans we do that don't add any value, how many preoperative assessments or investigations that are really aren't warranted in in low-risk patients. And we have to engage and, and help health care systems reduce those costs because that's the future.

You know, in the past, health care systems compensated for reducing margins by increasing their volume, thereby attempting to maintain their bottom line. That's not going to work anymore. The payments are actually going to dip below what historically has been the cost of care, and so increasing your volume isn't going to save you. Health care systems in the future are going to figure out how to reduce their costs, and not by penny pinching and paying their physicians less, but by

actually getting rid of care that doesn't help anybody, but the physicians have to be engaged with that.

DR. STRIKER:

Well, it's interesting you bring up the, the cooperative because I think when we see, especially at the corporate level, talk about the value equation in medicine and however you define it, cost is always the denominator. And I think a lot of practitioners see that and feel like it's a, a tool that inhibits or impairs the physician's ability to practice because they feel like the only variable that administrators or corporations want to adjust to increase value is to decrease cost. And so I, I understand what you're saying about that cost necessarily coming out of a physician's salary or reimbursement, if you will, but they may see it in terms of supplies or support systems or the ability to order tests that the physician feels is necessary. And so how do you, how do you feel about getting the message of cooperation or alleviating those fears from a practitioner's standpoint that the denominator, the cost is not always the target, per se?

DR. MOREWOOD:

Well, I think I'm going to push back on that concept a little bit in that cost probably is always the target. I mean, if you look at society overall, the reason that we drive Teslas and all carry around iPhones is because we've become more efficient over time. We're able to produce more goods and services with the same or fewer resources. The exception to that is health care. We don't seem to innovate when it comes to process or how we, how we manage our patients to provide the same or better care with lower costs. And we can do that.

But I think physicians have to understand that they own that process. I mean, it's easy to hear cost discussions at the administrative level and push back against it and say, look, I'm the physician. You can't impair my judgment or my, my ability to decide independently. That's fine if that's your opinion, but then understand, then you need to own it. And are we really moving through our days and our, and our practices with ownership of the health care system in the way we would if we actually owned the hospital?

So in other words, when we want to order another test? Well, let's just say we were paying out of pocket for that test for ourselves. Would we pay for that test? Do we really think it's a value in that patient or that population of patients? When we manage our processes, do we make them as efficiently as possible? Do we give three times the amount of Sugammadex that is really needed to reverse

neuromuscular blockade? Or do we figure out, do we, do we put in place quantitative monitors so we can titrate the amount of Sugammadex to exactly what is needed, so we're not wasting it?

Administrators admittedly do not understand what is of value and what is of low value in the health care system. But physicians then have to take that on and they have to, they have to understand that it's not just administrators pushing cost reductions as, as the highest paid individuals in the health care system. As supposedly the smartest people in the health care system, we are the ones that really should be driving that.

DR. STRIKER:

Well, I certainly appreciate the, the concept of a partnership. Would you agree that it's imperative that it has to be a partnership because if there's this, on one side or the other, this idea or the perception that, you know, the other side is just making it difficult for the one that's looking at it, it's not going to be successful.

DR. MOREWOOD:

There is no question that there is no future in health care for any group of providers that do not see themselves as a part of the whole. It has to be a partnership. And not only does it have to be a partnership between physicians of different specialties. It needs to be a partnership, a real partnership, between physicians and administrators and nursing staff and respiratory therapists. And in fact, ultimately it needs to be a, a partnership between all those individuals and the patients they're trying to serve.

If we can't engage our patient population, if we can't get them to understand that we're doing what is in their best interest, if we can't sell them on the value of, of what we're trying to provide, then we're all going to be in trouble. So yes, I think anesthesiologists specifically, but health care professionals overall, really need to be rapidly shifting their focus to how, how do I partner most effectively with the person to my right and the person to my left and the person who's going to take this patient on tomorrow? Because historically we haven't been very good at that.

DR. STRIKER:

Well, can you spell out some of the trends you think listeners should be aware of? Basically, just summing up the big, the big ticket items?

DR. MOREWOOD:

Sure, I, I think they need to be aware that we're going to be moving much more towards integrated delivery systems, whether that's a health care system that owns several hospitals, whether it's an insurance agency or a, an insurance company that is integrated with a health care system and a physician practice plan. Overall, you're going to be looking at much larger conglomerations that are attempting to produce a health care product. You're going to be looking at a shift away from volume of care towards smarter, more cost-effective care. And you're definitely going to be seeing consumerism in health care in a way that is, is unrecognizable to most of the physicians in my generation or older. We're just simply not used to thinking of patients in that way, but patients are going to begin to behave like consumers do in the rest of the economy. When we go out and shop for a car or a new cable company or decide which movie we want to see at night, you know, we have consumer behaviors. Patients are going to behave that way as well. So we, as, as health care providers, need to adapt to that. I think those are the big trends

DR. STRIKER:

Before we go. Do you mind just elaborating a little bit on, on how you feel that anesthesiology is suited for that?

DR. MOREWOOD:

I think anesthesiologists have a unique position within the health care system. We are central to most a hospital-based care. We see every aspect of hospital care from birth to death, from the ICUs to the labor room to all of the invasive procedures. We are uniquely well suited to picking out what is of high value and what is of low value. I joke with our residents all the time that if, if there is a specialty group somewhere in the hospital that is planning an episode of high cost, low value care, they invite us because that's what we do. We get involved in those procedures.

So we have a unique perspective within the health care system and we're used to collaborating. Most other physician groups really don't do that as a matter of their practice, whereas we don't do anything by ourselves. So, my experience of health care has been that anesthesiologists very often are the most reasonable in the room, people in the room, they have the broadest perspective, and, and they certainly have a, a nose for what really provides value to patients. So I think we, we have practitioners in our specialty that are very well adapted to this and will lead the way.

DR. STRIKER:

Well, Dr. Morewood, thanks so much for joining us and sharing your insights and your thoughts. Appreciate it.

Finally, I spoke with Dr. Paloma Toledo, Assistant Professor in the Department of Anesthesiology at Northwestern University, about health care equity. Dr. Toledo co-authored a piece in the monitor about the role of anesthesiologists and anesthesia practices in ensuring access, equity, diversity and inclusion.

Thanks for joining us today, Dr Toledo.

DR. PALOMA TOLEDO:

Thank you for having me.

DR. STRIKER:

Well, let's start out with why anesthesiologists should care about diversity and health equity, subjects we've covered on this show in the past, but I'd like to hear your perspective on why this matters.

DR. TOLEDO:

So, as anesthesiologists, we should care about health care disparities because we know that disparities can impact patients' health. And as anesthesiologists, we're in the perfect position to interact with patients at all aspects of the life span from pediatric patients all the way to geriatric patients. So, if we're able to help improve someone's health through an intervention at the time of surgery or perioperatively or post-operatively, we can help impact patients' health over their lifespan.

DR. STRIKER:

Well, and I would imagine, you know, historically, anesthesiologists have always been in hyperacute medicine or right at the point of care when, when a patient needs a procedure or an intervention and we haven't been as involved in their long term care, but, but do you think that as anesthesiologists, we can have actually a greater impact on a per time basis compared to, say, the primary care physicians because we get that short but valuable time with the patients?

DR. TOLEDO:

I 100% agree with you because, you know, anesthesia has really evolved and now we are perioperative physicians so we can optimize patients prior to surgery and through the use of the pre-op clinic and other resources. Same thing, you know, with day of surgery, you can have an intervention with a patient about smoking cessation or lifestyle interventions that may really impact their health after surgery.

So again, we may not have a longitudinal relationship the way internal medicine physicians do, but I do think that we are very well suited to interact with patients at a moment that often they're stressed and you can use it as an educational opportunity to cause change.

DR. STRIKER:

Well, do the problems of health care disparities loom larger in certain subspecialties or is it across the board? Are there a couple of examples, for instance, of where that disparity is greater?

DR. TOLEDO:

So, there isn't really an example of a disparity being greater. I think every time that they have looked across the board at perioperative disparities, they have found them going all the way from pediatric disparities to management of pain.

I'm an obstetric anesthesiologist, and my personal research focuses on racial ethnic disparities in pain management and perioperative outcomes for mothers having babies. And so, in obstetric anesthesia, for example, we have found that there are disparities in the use of labor epidurals for management of labor pain. And this is important because untreated pain can result in the development of chronic pain and possibly postpartum depression. And these are things that affect minority communities more than other communities. So, if we are to intervene at the time of labor and delivery, it's possible that you can, like I said, change the patient's health trajectory going forward.

Similarly, I think another disparity that's been in the media a lot, and many have heard of, even those not in health care, are the racial ethnic disparities in maternal mortality with the most striking disparity being that black mothers are four times more likely to die than non-Hispanic white mothers. And so, I think it just underscores the importance of looking at the health care system to see where are the opportunities for us to identify what the root cause of the problem is so that we can build solutions that will ultimately improve patient outcomes.

DR. STRIKER:

Well, in the article, you make the point that health equity is not only a social justice issue, but also an economic issue. Can you tie those together for us, specifically where you see this going? Like, what does it mean for the future of health care?

DR. TOLEDO:

So, I think when you think about health, there are economic consequences of being in good health. So, if you are sick, you miss work, you can't function as part of society. So, it's been shown that health care disparities are associated with trillions of dollars of cost when you think about illness and premature death.

Studies have also shown that if you were to eliminate health care disparities for marginalized group, you could potentially save 230 billion dollars over a three year period in this retrospective study. So, there are direct cost benefits to treating disparities.

DR. STRIKER:

Well, also in your article, Dr. Toledo, you outline a multi-pronged approach for eliminating health inequities. Do you mind telling our listeners a little bit about this approach and how do you imagine these issues being addressed?

DR. TOLEDO:

So, I think when you think about addressing health care disparities, I think you need to go to the root of where the disparities may come from, and it may be something that begins at the patient level, it may be something that begins at the provider level, or it's something that could arise from the health care system level or an interaction between the three.

So, I think when you're talking about addressing disparities. One area that you could begin at is making sure that you are educating your patients about their options for, you know, for example, using obstetric anesthesia, labor pain relief options. So, patient education programs are one option for addressing disparities and making sure that they're really making informed decisions about their, their health and health care.

Similarly, I think as providers, it behooves us to engage in patient centered care and use shared decision making so that we're really making sure that we are educating

our patients on what their choices are and understanding where patients are coming from, when they refuse care to understand if this is really something that's driven by fear or if it's actually the patient's true preference. Because I think that we should value patients' decisions if they are making informed decisions.

Another area that I think is important at the health care provider level is making sure that providers are aware of health care disparities and the potential impact of health care disparities and tools that we can use as providers. So, similar to the use of shared decision making. I think as providers, another opportunity, especially for anesthesiologists interacting with patients in the perioperative setting, is making sure that we use interpreters to communicate with our patients again, because that will improve the quality of the patient provider communication. And that's a best practice that I think sometimes we try to get away with because we don't want to slow down the workflow of the day to day. But a small, you know, use of interpreter may actually change the way that the patient approaches their health care decision making.

And then a final bigger strategy, which is not something that can be fixed overnight, is looking at the workforce of anesthesiology and trying to ensure that we're recruiting providers from diverse backgrounds. Because again, other studies have shown that patients have better communication when there is racial ethnic concordance with their providers. I don't think that we need to have all patients necessarily be cared for by providers of the same race ethnicity. But I think just having a diverse workforce leads to more awareness of disparities and a change in the culture as it relates to inclusiveness.

DR. STRIKER:

Well, many of our listeners are fellow anesthesiologists, and I'm wondering, what would you like them to know? You just mentioned a little bit about race and that it's not all about that. Is that one of the common misperceptions about diversity and health care inequities? And are there other misconceptions you'd like to dispel for our listeners or are there other messages you'd like to get across to our listeners?

DR. TOLEDO:

Yeah, I think you're, you're right in that when we talk about disparities, I think most people tend to think only of racial ethnic disparities. But there are many different examples of disparities. There's disparities among obese versus non-obese patients, there's disparities among patients who use drug use, lower income versus higher income, rural patients versus urban patients. So, there are several types of patients who do experience different care. And so, I think making sure that providers are

aware that racial minorities are not the only population who experience marginalization or disparities is one important takeaway for our fellow anesthesiologists.

And I think the other important takeaway is that even anesthesiologists have a really important role to play in addressing disparities because again, I think that we have a lot of opportunities to evaluate the data on patient outcomes and make changes at the perioperative setting that can reduce disparities, so we, I think, are experts in pain management, and we can directly impact pain disparities.

And I think also, we have as perioperative physicians, a big role in improving perioperative outcomes. And so, I think we can impact larger outcomes, such as morbidity and mortality through some of these system-based interventions, which I think are very possible and we should be a part of as a multidisciplinary team.

DR. STRIKER:

Well, this issue in The Monitor is all about the future of anesthesiology. Are you optimistic about the future?

DR. TOLEDO:

I am I think that we have had a lot of attention given to racial ethnic disparities recently, and I think because there are so many people interested in reducing disparities, I think together collectively we are going to come to solutions faster than individual researchers would ever have done on their own.

In our state, in Illinois, we have just started a birth equity initiative and the racial and ethnic disparities in the state of Illinois were even higher than the national racial ethnic disparities when it was last looked at. So, what we are doing is doing a multi-pronged approach. We're working with almost all of the Illinois birthing hospitals to collect data on what disparities exist in hospitals and giving hospitals tools that will help ultimately reduce racial ethnic disparities in maternal outcomes.

So, I think we will work faster together, and we will learn more from the interventions that are beginning to take place so that we move away from just identifying disparities and finally start implementing actual interventions to reduce them.

DR. STRIKER:

Well, Dr. Toledo, thank you so much for sharing your thoughts and your insights with us today and look forward to reading the supplemental issue and the article.

DR. TOLEDO:

Thank you.

DR. STRIKER:

Well, thanks everyone for listening to Central Line. Please visit [asamonitor.org](http://asamonitor.org) to read this special supplemental issue. It's going to be available in late September 2021, or any time thereafter, or certainly watch your mailbox in October for your print copy. We know you'll enjoy this glimpse into the future. I'm looking forward to reading this issue. And please join us again for the next episode of Central Line. Thanks again.

(SOUNDBITE OF MUSIC)

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