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VOICE OVER:

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

DR. ADAM STRIKER:

Welcome to Central Line. I'm your host and editor, Dr. Adam Striker. In this Inside the Monitor episode, we welcome Dr. Talmage Egan, professor and chair of the Department of Anesthesiology at the University of Utah. Dr. Egan is here to talk to us about the specialty, what he's learned from medical students who are considering anesthesiology, and why he thinks it is such a uniquely great career choice. His article on the subject in the January Monitor could be required reading for students considering our specialty. So I'm certainly happy to say, Welcome to the show, Dr. Egan.

DR. TALMAGE EGAN:

Great to be with you. Thank you, Dr. Striker, for that warm welcome.

DR. STRIKER:

Yeah. Well, before we talk about why others should choose anesthesiology, let's hear why you chose anesthesiology. And specifically if you knew early, late or how you came to that decision.

DR. EGAN:

Well, I must confess that I never really considered a career in anesthesiology as a young medical student or as an undergrad student. And it's fair to say that my path to anesthesiology was somewhat circuitous. I knew that I wanted to pursue something on the surgical side of the medical spectrum, but I wasn't sure exactly what would be the best fit. I ended up doing a two year preliminary general surgery residency that gave me a little opportunity and time to decide what would be the best specialty choice. And through that process, I was really drawn to intensive care medicine, which essentially

means that I decided I liked physiology a little more than anatomy. And that's what led to a career in anesthesiology for me.

DR. STRIKER:

Well, let's jump right into your Monitor article. There's there's a couple of aspects to it. First, you tell the reader that you speak with medical students about the specialty often as part of your recruitment efforts. Then you also give the reader a brief history of the specialty like ether day and how anesthesiology was named. Why don't you talk a little bit about the history of anesthesiology and why you think it's important for medical students to know that as they're making their decision?

DR. EGAN:

Well, let me begin by emphasizing that this lunch meeting I have with the medical students rotating on our service is really one of the really delightful parts of my job. Our medical students rotate with us for a couple of weeks. And so I have the opportunity to share lunch with them while they're rotating on our service. It's usually perhaps 4 to 6 students, and we meet in a conference room, and I essentially use this as a recruiting tool. We're trying to attract the best medical students into our field. And I like to try to give them a sense of why I became an anesthesiologist and why it's a very rewarding career. And my basic message is that anesthesiology is an incredibly wonderful professional journey.

I like to introduce them to the history because I think it's so important that they understand how anesthesia changed the world so fundamentally. We use as a framework for our discussion Robert Hinckley's 1893 work, the First Operation with Ether. And using that painting, I introduced the students to all that happened on Easter Day. I introduced them to the main characters, the surgeon, Dr. John Collins Warren, the anesthesiologist, although that term didn't exist yet, the part time medical student and Boston0based dentist, William Thomas Morton, and then the star of the show and story, Mr. Gilbert Abbott, who is the patient that volunteered to undergo this, what became the first demonstration of the anesthetic properties of ether on October 16th, 1846, at the Massachusetts General Hospital. And I note that this momentous occasion has come to be known as Ether Day. And as we talk about the history and how this event unfolded, I ask the students to think about how this event in medical history was so important in altering the course of medicine and public health in such a fundamental way.

I like to finish by reminding them that when John Warren finished the operation and the patient, Mr. Abbott, was emerging from this historic first anesthetic that Warren turned to

the crowd assembled in the amphitheater and said, Gentlemen, this is no humbug. And I like to ask the students how they interpret John Warren's famous utterance. And it's a really sort of fun to walk the students through this and get their reactions and get some thinking about why they think this event was so important.

I like to sum up by reminding them that not long ago, the editors of the New England Journal of Medicine asked physicians what article, what paper in the whole history of the Journal was thought to be the most impactful. And the clear winner was the case report by Henry Bigelow, who was a colleague of Dr. Warren and also a surgeon at the Massachusetts General Hospital who reported this historic first anesthetic and some subsequent anesthetics as well. And it's fascinating to think about how that article is viewed as the most influential article ever published in such a momentous and such an important journal.

DR. STRIKER:

It's fascinating. Certainly would have been interesting as a medical student to get to have a lunch like that. Do most of them already have their mind made up? And does that include anesthesia as their specialty of choice?

DR. EGAN:

I think the students who rotate with us come in several different flavors, several different phenotypes. There are those that are rotating as fourth year medical students late in the academic year, and they've already matched in one specialty or another. And they're just hoping to gain some experience with some of the skills that they can pick up in anesthesia that will be helpful to them as a house officer. Learning how to participate in the resuscitation of trauma patients and learning bag and mask ventilation techniques for the codes that they'll participate in as house staff. Some of them are interested in learning more about pain management or the provision of procedural sedation. So that's one sort of cohort of medical students. The others that are rotating with us typically are interested in anesthesia, and they're using the rotation as a basis to help them solidify their decision about whether anesthesia is the field that they want to pursue.

DR. STRIKER:

Do you find that this meeting or the rotation in general influences the students to maybe look at anesthesia or decide on anesthesia as their specialty of choice?

DR. EGAN:

I think, Dr. Striker, that the rotation is really critical. That gives them a really close up view of the day-to-day practice of anesthesiologists. And it also helps them sort of decide if they feel like the people in anesthesia are people that that they're drawn to and that they want to work with and that they want to emerge as their colleagues. And so the rotation, I think, really is a critical, critical time for these young students that are interested in perhaps pursuing a career in anesthesiology.

DR. STRIKER:

Do you feel like a lot of them, though, maybe don't know as much about anesthesiology by the time they rotate, maybe perhaps the ones that the cohort you referred to that haven't decided on necessarily anesthesiology is the right path, but could be a great opportunity to learn some clinical skills. Do you find that that cohort does not know as much about the specialty and then is surprised to learn about what is really involved in not only being an anesthesiologist, but the background and expertise that is necessary?

DR. EGAN:

Well, I think you're absolutely right that anesthesiology is a bit of a mystery to most students. At many, perhaps most medical schools, it's not a required rotation, although at our school it's the most popular elective that students can participate in. And so a huge proportion of our students take our our elective and rotate with us. But it is true that many of them don't really know much about anesthesiology. And what little they do know is simply a function of what they observed as part of their surgery rotations. And I think they're very interested to discover what a wonderful field it is and and how broad it is, how it's an interesting mixture of procedural medicine and cerebral aspects of medical practice. And so it's fun to get a chance to introduce them.

Getting back to the history importance for just a moment. It's fun for them to consider what a pivotal moment it was in the fall of 1846 when anesthesia sort of got off the ground and provided the launch pad, not just for the science and art of anesthesiology, but also for the advancement and launching of modern surgery. I often tell the students that when we use a scalpel to alter an addict during the treatment of a malady, we refer to that field as surgery. Whereas when we use a drug, give a drug to alter physiology in the treatment of disease, we refer to that as internal medicine. And it was this Ether Day that really made this entirely new way of approaching human illness through surgery possible because prior to the advent of anesthesia, surgery was really of necessity, quite primitive and rudimentary. And it wasn't until anesthesia was possible that surgery could really get off the ground. And so I like to emphasize to the students, and these are aspects that they really haven't considered typically because they don't know much about the field. I like to ask them what is a bit of a trick question, What specialty was

born on either day? And inevitably, the students come to acknowledge that it was actually a twin birth because the discipline of surgery couldn't really get off the ground in a sophisticated way until the discovery of anesthesia made it possible to do longer, more complex operations.

And so the students rotating with us during these lunch meetings, they really get a sense of what an amazing event it was to discover anesthesia and then see how that ripple through medicine around the world, making such an advance possible. That is, that surgery could really now start to mature as a specialty and the two specialties have grown up together, ascending to heights that were really unimaginable to those who were congregated on that day in Boston in the fall of 1846.

DR. STRIKER:

Yeah, great points. Certainly worth reemphasizing how impactful that that day really was. We're so used to hearing about it, but revisiting it and recognizing just just the seismic effects that that had throughout medicine is never a bad thing to get to go back and think about that again.

Well, you touch on some themes in your article that you've identified from asking anesthesiologists why they were drawn to the specialty. One of the themes is the broadness of the specialty. Do you mind talking about that a little bit? Why you think that's a draw?

DR. EGAN:

Sure. I do think that's a tremendous draw for students. The world of modern medicine is so super specialized that I think medicine sometimes gets so focused that students are worried that they're going to have to abandon so much of what they learned because they've got such a laser focus on a given organ system or a given set of diseases. And so the fact that anesthesiology is so broad is really an attractive aspect of the field.

I usually try to explain this in the context of the notion of perioperative medicine, which is a dominant theme in modern anesthesia. I like to define perioperative medicine as comprehensive care of the surgical patient over the entire spectrum of perioperative time and space. And that's a interesting thing for the students to consider that we care for patients both before surgery, during surgery, and in everything that happens after surgery and in all the places in which that occurs. And in that respect, you can sort of think of the practice of anesthesiology as a something of a Swiss Army knife in medicine in the sense that we're taking care of of patients that are both young and old, patients that are men and women, both the healthy and the critically ill. That is, we care for the

football quarterback who's hurt their ACL and need a repair of their knee injury and also of the patient from the ICU that's really just clinging to life and is so critically ill. We're present at the beginning of life on labor and delivery and also at the end of life in palliative care settings. And between those bookends of life, we practice in such a diverse array of clinical environments: the operating room, the emergency room, the intensive care unit, procedural care suites, preoperative clinic and hospital wards while on pain rounds and so on.

So it's an incredibly diverse specialty and takes all kinds of different forms. I think many medical students are surprised to learn that anesthesia can actually be a practice that never involves the operating room. That's true in our practice at the University of Utah, about a third of our doctors practice is more focused on venues outside the operating room in pain clinics, intensive care units, preoperative clinics and so on. And then, of course, there's the all the possibilities in a career in academic anesthesiology that affords the opportunity for bench research and clinical investigation, data science and the development of new pedagogical methods. So it's a very broad field.

I also like to mention to students that given the broad practice and substantial interdisciplinary connections, anesthesiologists are often well positioned to take on administrative executive roles within the hospital. And that's a trend that we see unfolding in anesthesiology across the country. So this metaphor of anesthesiology as the Swiss Army knife, I think is a is an attractive notion to the medical students. It's true of a number of other specialties, such as general surgery, but we can certainly make the claim that we take care of all kinds of different patients and all kinds of different settings that are both sick and healthy. And so it's a very, very broad field, and that is an attractive thing to the students. No question.

DR. STRIKER:

How does that play into the appeal to anesthesiology? Is it clinical skills per say? Is it the marriage of the clinical skills with the perioperative medicine that becomes an appeal to students looking to choose it as a career? Or do a lot of students still find it intimidating that we we have a lot of very specific skill sets?

DR. EGAN:

Well, I think ultimately they view the specialty as a package deal and they're interested in the broadness of the field, the knowledge base and skill set that's required. They're interested in the procedural aspects. Certainly it's broad enough that that might be unappealing to a certain segment of medical students.

DR. STRIKER:

Well, and in your experience, how does that way into the students decision when they're deciding on specialties, or is it just that some students just have a they have a knack for it. They have an aptitude or a desire to do something more hands on than maybe other specialties?

DR. EGAN:

Well, it's hard for me to get into the minds of the individual students, but I strongly believe that the expansive knowledge base and skill set required of the anesthesiologist is something that leads a lot of medical students to choose anesthesia as a career. There are significant chunks of numerous other specialties of medicine in anesthesiology, for example, there are important chunks of cardiology and pulmonology and hepatology and nephrology that really inform anesthesia practice. And this is something that is interesting to the medical students and compelling to them because they don't want to sort of throw all that away.

Same thing is true of surgery. There are major components of surgery in anesthesiology. I guess that goes without saying. But if you think about trauma care and transplantation and surgical technology and how that influences anesthetics, this is another part of the specialty that is interesting to the students. I like to remind the students that along these lines, surgical patients bring physiologic and anatomic alterations to the operating room that reflect both their surgical illness and also their other comorbidities. So, for example, an appendectomy patient with intra abdominal sepsis not only needs to have this laparotomy, but the anesthesiologist, just in addition to conducting the anesthetic, needs to manage the physiologic alterations of sepsis. A patient with a tumor in the airway represents another example of how the surgical illness can have very profound implications on the anesthetic management. The same is true for the comorbidities that the patient may bring to the table. A patient with diabetes, for example, needs to have their glucose and insulin therapy managed during the operation. A patient with congestive heart failure, in addition to being anesthetized, also has to have their circulation supported and their congestive failure symptoms and altered physiology managed by the anesthesiologist. So again, the expansive knowledge base and skill set I think is a is a real winner for the specialty because students like the fact that they'll be drawing on so much of what they've learned over the years in their medical student studies.

DR. STRIKER:

Well, I want to learn a little bit more about how these messages land with medical students and specifically ask you about some of the cons of anesthesiology as well. So if you don't mind, stay with us through a short patient safety break.

(SOUNDBITE OF MUSIC)

DR. JEFF GREEN:

Hi, this is Dr. Jeff Greee with the ASA Patient Safety Editorial Board. The intra hospital transport of patients can be risky, but most complications are avoidable with planning, preparation, and safety checks. Ensure an anesthesia facemask is available and be prepared for the possibility of manual ventilation during transport by threading the oxygen tubing through the hole in the mask to ensure it is included during transport of an intubated patient. Should an inadvertent activation occur, and assuming the patient is an easy mask, it might be preferable to mask ventilate the patient with 100% oxygen until conditions are appropriate for urgent reintubation. Some even consider having a supraglottic airway device and keeping emergency medications readily available. Don't forget a mask before embarking on transport. This simple tip may save your patient's life.

VOICE OVER:

For more information on patient safety, visit asahq.org/patientsafety22.

DR. STRIKER:

Well, we're back. And, Dr. Egan, you have identified two common reasons residents and even attendings decide anesthesiology is not right for them. Do you mind just describing those and elaborating a little bit?

DR. EGAN:

Sure. Well, the point there, Dr. Striker, is that when medical students are rotating with us, they hear a lot about why the attendings and residents with whom they are working decided to pursue a career in anesthesiology. So they get a lot of that message. And it's broadly along the themes that we've been talking about, but they rarely hear about why people sometimes leave anesthesiology. And that's a very important thing to emphasize because it's important for students to know if some of these reasons might apply to them. At the outset of this discussion, I always emphasize to the students that the flow of postgraduate trainees is overwhelmingly toward anesthesiology, not away from it. It's

not unusual, for example, for residents or attending physicians from other specialties to seek training opportunities in anesthesiology at some point in their career development. But sometimes people do indeed leave the field of anesthesiology. And over the years, although there are a variety of reasons, I've noticed a couple of common themes. we have to set aside some of the obvious reasons that sometimes it might be necessary for a doctor to leave the field. For example, drug addiction and controlled substance diversion and abuse is a well described occupational hazard in our specialty, and sometimes that problem rears its ugly head and in often a very tragic way. But if we set aside those kinds of problems and look at the more quotidian sort of routine common themes as to why a anesthesiology resident might decide that another specialty is a better fit for them, there are these two themes.

The first relates to mistaken impressions about the lifestyle of the anesthesiologist. This is what I sometimes call the lifestyle problem. Some students erroneously assume that anesthesiology is a so-called good life specialty in terms of the work schedule. And those students are inevitably disappointed. The point here is that anesthesiologists are in the hospital on the job every day, every night, every weekend, every holiday throughout the year. I really try to drive that point home by making a simple sort of point about what's going on. On Sunday morning at 2 a.m. in the hospital. At a big academic medical center, their will typically be over a dozen anesthesiologists in the hospital doing urgent and emerging cases and patient management and operating rooms and trauma bays and labor and delivery units and ICUs. And so this is not a daytime specialty. It really is a specialty where you get up early and often you work late. And it's important to understand that it's a demanding specialty in that way.

So that's one of the common themes, common reasons for people leaving the specialty is students who mistakenly assume that anesthesiology really is a good life specialty. It is a good life specialty in certain respects. Chief among those, I would say, is the fact that when you're not on the call roster on a weekend or holiday or evening, you can be pretty confident that you're not going to be called in unless there's some real big disaster that requires an extra effort on the part of the department. So that means that you can plan your life around those days that you're off and schedule a time with your family or leisure activities and so on. So it's a good life specialty in that respect. But it certainly is a demanding specialty in terms of the work schedule. Early mornings, late nights, your share of holidays and weekends and so on.

The second common reason for leaving the specialty relates to the acute care nature of the practice and sometimes medical students rotating with us on a two-week rotation may not be sufficiently introduced to this reality. That is, they may not encounter the many life-threatening problems to which anesthesiologists must rapidly respond. This issue is what I sometimes refer to as the acuity problem. Critical situations arise in

anesthesiology pretty frequently, and the anesthesiologist has to face those critical situations and be prepared to manage them. I'm thinking about things like a routine case that suddenly presents an unanticipated difficult airway or torrential hemorrhage in a case that wasn't thought to be at much risk for significant blood loss. Things like severe bronchospasm upon instrumentation of the airway or anaphylaxis to one of our medications. These are just a few examples of dozens and dozens of life-threatening events that can occur in anesthesia practice. And there are some people who eventually realize that their personality and mindset is perhaps not especially well suited to tackle these kinds of very acute clinical problems. And so this is something that students really have to grapple with and decide if that's a burden that they really want to shoulder.

DR. STRIKER:

In the article, you suggest that a job posting for an anesthesiologist could read, quote, Help wanted must have the brain of an internist, the hands of a surgeon, and the heart of a psychiatrist, unquote. Do you think medical students are trained to understand that last bit, the part about the heart of a psychiatrist? And also, why is that important? And should we be talking about that more with regard to our specialty?

DR. EGAN:

I do think that that's a really important and neglected discussion in our specialty, both among the practitioners who are currently working in the field and also among medical students whom we are hoping to attract as our colleagues. This little aphorism that a job description for an anesthesiologist could be, Help wanted, must have the mind of an internist, the hands of a surgeon, and the heart of a psychiatrist is sort of a perhaps a clever way of pointing out the broadness of the field and how we draw on the knowledge that we learn in the study of internal medicine and also the procedural skills that we learn in surgery. And then finally, the knowledge and skill that's required to make sure that we're considering the patient's experience and all the anxiety and fear that needs to be managed when a patient is undergoing surgery and facing an operation and an anesthetic.

A simple way to think about the job description. As I explain to medical students, is that we have three main duties as an anesthesiologist. The first is to conduct the anesthetic. And that's sort of the obvious part. And that's a big focus of the training, is learning how to produce the drug induced reversible coma of anesthesia in a variety of of different ways and also all the other ways that we use to anesthetize patients. The support of the patient's life is sort of the ICU part of what we do. And anesthesiologists are well known for their contributions to code blues and trauma and intensive care resuscitation. I remind students that any time there's a patient who's acutely dying and critically ill at

some place in the hospital, there's almost always an anesthesiologist in attendance to assist in the care of these patients. And of course, the operating room and the post anesthesia care unit can be viewed as critical care units, where we're often providing life sustaining support in patients that are either under anesthesia or recovering from anesthesia. So that's another big part of what we do. But this final part is a part that we don't talk about enough, and that is the defense of the patient's dignity as human beings. And I think it's a it's a part of the job that really is sort of the our most solemn duty as anesthesiologists.

DR. STRIKER:

Let's talk about that just for a little bit, because I do think it is an overlooked aspect to our job by by many. And as you pointed out, patients and their families are trusting you with their lives in the most vulnerable times of their life. And you have a short period of time to develop a rapport with them oftentimes. So let's talk just for a minute or two more about this aspect and how you perceive it as whether it's understood, misunderstood, or how we could do a better job of publicizing that aspect.

DR. EGAN:

Sure. Well, one way of thinking about this is that there's no time in human to human interaction where one person voluntarily surrenders their well-being more fully and absolutely to another person. It's important for our students to understand that the anesthetized patient is utterly and completely helpless. They just can't do anything for themselves. And so the anesthetized patient is really depending on the anesthesiologist to keep them safe by conducting the anesthetic and supporting their vital functions, but also defending their their human dignity. And this final aspect, again, is something that we don't talk about very much. It's really incumbent upon the anesthesiologists to take the lead on insisting that no one in the operating room speaks ill of the patient or makes fun of the patient, that their modesty is preserved, among other actions that demonstrate the respect and reverence we have for the anesthetized patient, and that recognizes that they really can't protect their own dignity because they're in this reversible drug induced coma of anesthesia. And so because we are the ones as anesthesiologists, that have rendered the patient unconscious and defenseless, we have a special obligation to perform that function. So this is an interesting burden that we carry that really is a critical part of what we do and a part of our job description that we certainly don't emphasize enough.

I like to remind patients about this, that we're their guardian and we're going to be right by their side. And I often, in my discussions with patients preoperatively, mention these three things: that we're going to keep you under anesthesia, we're going to provide all

the support of your vital functions, and we're going to make sure that you're treated properly while you're asleep. And when you look at patient in the eye and and tell them that you're going to be doing those three things and they get a real sense of of what you're up to, they just melt and they really gain an appreciation for what the anesthesiologist is bringing to the table.

I want to emphasize that, of course, everybody on the operating room team is dedicated to these functions. And so all of the team--the surgeons, the nursing staff, the other ancillary staff--we all contribute to these goals. And in particular, we all contribute to the defense of of human dignity. But again, the anesthesiologist has a special responsibility because we're the ones that have have rendered the patient defenseless. I love to tell our students that a day a person has their anatomy and physiology irrevocably altered by a surgeon's knife is truly a landmark day in their lives. And we're sort of their guide on this sometimes, not not always, but sometimes perilous journey. And we're standing by their side from inductions to emergence. And we're defending them against all these dangers that they might encounter along this perioperative path. And that's a fun thing to do and a very rewarding thing to do. And it gives anesthesiologists a tremendous sense of satisfaction in taking care of patients in this way.

DR. STRIKER:

Yeah, well-stated. Well, let's just wrap this up by talking about what you hope our listeners, but anesthesiologist specifically, would get out of this article. What takeaways are you hoping for?

DR. EGAN:

Well, it's interesting to think about what motivated me to contribute this piece. Ultimately, as the chair of an academic anesthesia department, I had hoped for many years and looked for many years for an article that I could distribute to students that was essentially a summary of what we do. And I wanted to have something that the students could take home and read that would provoke, provoke some thinking on their part and that would give them a sort of an overall introduction to the specialty. After a good look through the literature, I concluded that there just wasn't a piece that I could use that would serve that purpose. And so that's what motivated me to make this contribution. Honestly, I don't know how much interest there might be in this piece, but I do believe that any anesthesiologist who mentors medical students and, of course, department chairs and program directors fit into this category in a very obvious and prominent way, but also anesthesiologists out in practice in all kinds of different venues often have medical students or even undergraduate students who are shadowing them, and they want to learn a little bit more about the practice of medicine and about anesthesiology in

particular. I'm hoping that they'll find this to be a useful handout, that they'll be able to interact with a student and then say to them, We've had a great discussion today, and I hope you've learned a little bit about what we do as anesthesiologists. But I want you to take a look at this article, and it might bring up some questions that you'll want to get answered. And it may serve as a sort of a little bit more comprehensive introduction to the field.

DR. STRIKER:

Excellent. Well, this has been a great discussion. Interesting, fascinating, on the breadth, the depth, just the rewards of anesthesiology. And I am certainly looking forward to reading your article in the Monitor. And for our listeners, be sure to visit asamonitor.org to check out Dr. Egan's article. I'm also told that has some great graphics as well. Is that right?

DR. EGAN:

I did have a few graphics prepared that are intended to introduce some of these concepts that we've talked about. And I think the most important piece in the article, honestly, is the title—Help wanted. Must have the brain of an intern, the hands of a surgeon ,and the heart of a psychiatrist--will help drive home the point that this is an incredibly rewarding field and one that they'll have to draw on a lot of their knowledge and skill that they've learned so forth so far in order to really emerge as a top notch anesthesiologist.

Maybe a quick message to just the medical students that might stumble over this podcast. We are really looking for energetic and intelligent, compassionate people drawn from a diverse talent pool to come into our specialty. And we pledge, as anesthesia department chairs and program directors, to enthusiastically welcome them to the team and help them mature into a great anesthesiologist. And I can just say with great confidence that you'll enjoy a wonderfully rewarding professional adventure as an anesthesiologist. It's a truly wonderful and marvelous specialty, and I've been so pleased to be a part of this specialty over the decades and look back with great satisfaction to the career opportunities that it has afforded me.

DR. STRIKER:

Dr. Egan, thanks so much for joining us today.

DR. EGAN:

Thank you. Great to be with you.

DR. STRIKER:

And to all our listeners, thanks for tuning in to this episode of Central Line. Please tune in again next time. And please go ahead and tell a colleague about the podcast or someone else that you might think finds it interesting. Tune in again next time. Take care.

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