**Harlan Krumholz:** Welcome to *Health & Veritas*. I’m Harlan Krumholz.

**Howard Forman:** And I’m Howie Forman. We’re physicians and professors at Yale University. We’re trying to get closer to the truth about health and healthcare. We’re excited to welcome Dean Melinda Pettigrew today. But first we’d like to check in on current hot topics in health and healthcare. And Harlan, what are you paying attention to now?

**Harlan Krumholz:** Well, Howie, I wanted to bring to you something that just came out, just was actually posted on November 1st, that was addressing the beliefs that Americans have in vaccines, and how, about this health information is growing. You and I have talked about this before. I’ve had the opportunity to work with two Harvard Medical School students that we know well, Kushal Kadakia and Adam Beckman, in writing [an article](https://www.nature.com/articles/s41591-022-02172-9) about healthcare misinformation, making recommendations to the FDA about it. But even as deep as I’ve been in this issue, I was surprised by [this survey](https://www.annenbergpublicpolicycenter.org/vaccine-confidence-falls-as-belief-in-health-misinformation-grows/) because it just blew me away that less than two-thirds of Americans think it’s safer to get the vaccine than to get COVID itself. That means that a third of Americans think it’d be better off just to get COVID than to get the vaccine. But even more than that, Howie, over a quarter think ivermectin is an effective treatment for COVID-19, even now.

And in September of 2021, when I thought that this had been talked about the most, it was only 10% of people who thought that. So something’s happening, Howie. I mean, maybe through social media or through channels that I’m not even aware of that’s amplifying messages. It’s not just that people thought it a while ago. This is actually growing. And I’ll give you just one more. A “small but growing number,” one in six, believe that “increased vaccines are why so many kids have autism these days.” Of course, that’s the Robert F. Kennedy Jr. platform, and that’s up from 10% in April of 2021. So I don’t know, Howie, these things that we take for granted in terms of, “Just take ivermectin because that has to be the strongest thing, right?” Just no evidence, really. No good evidence that really supports that. And you have all these people still thinking that ... one in four thinking that it’s an effective treatment for COVID. I don’t know. What are we going to do about this?

**Howard Forman:** Yeah, I mean, look, [Peter Hotez](https://insights.som.yale.edu/podcasts/health-veritas/peter-hotez-opposing-the-anti-science-movement), who I thought did a great job talking about how bad misinformation and the attacks on science are in this country, I think introduced this topic in a new angle for me. And that is why is organized medicine, why are other organized professional societies, not doing more at this point to fight back? Why are state medical societies even ... why aren’t we censoring people who promote things for which the evidence is absolutely not there? We certainly criticize physicians when they act outside of the standard of care for other things. But when it comes to these politicized public health measures, other than a few states where they’ve gotten aggressive, people are afraid of doing anything and saying anything.

**Harlan Krumholz:** Well, you know how strongly I believe in shared decision-making and empowered patients. So I find myself at this crossroads where of course people have autonomy over their own bodies and can make decisions about what they want to do, but I feel that many of these decisions are being made on flawed assumptions. And so they’re not truly informed choices. They’re misinformed choices. And again, somebody can make a choice that I don’t want to do something, of course, but I at least want them to be making that decision with the right facts. So let me ask you a few of these questions, Howie. I’m just curious how you would answer, then I’m going to ask you what you think happened in the U.S. So please indicate if you believe the statement below is true, false, or if you’re not sure. Here’s the statement. “Seasonal flu shot distributed in the U.S. increases your risk of getting COVID-19.” Is this definitely false, probably false, probably true, definitely true, or you’re not sure?

**Howard Forman:** I would say definitely false but I’m not sure I’ve seen a paper to say that.

**Harlan Krumholz:** Yeah, I mean, I think it’s definitely false too. I mean, I have not seen anything that would suggest getting a flu shot is going to make you more susceptible to COVID-19. And yet about 10% of people think that that statement’s true, that the flu shot could make them more susceptible to COVID. But even what bothered me more was one in five people weren’t sure about that answer. And how about this one, Howie, tell me what you think. Again, it’ll be definitely false, probably false, probably true, definitely true, or not sure. “Vaccines in general are full of toxins and harmful ingredients like antifreeze.”

**Howard Forman:** Definitely false. And this we know because this has been a widely discussed topic for decades, ever since we started looking at thimerosal as a potential risk factor for things. We’ve studied this very closely. Certainly not antifreeze, but even the chemicals that are in there, we’ve now studied them.

**Harlan Krumholz:** And just look at the way the question’s ... “full of toxins and harmful ingredients like antifreeze.” So what percent of Americans do you think are now saying that that’s definitely false, like you?

**Howard Forman:** Oh, definitely false, like me? I would hope 50%. I actually would hope it’d be much higher, but at the very least, I would hope 50%.

**Harlan Krumholz:** So you’re on target. 50%. But I think only 50% don’t think that these ... I mean, it’s amazing. And then—

**Howard Forman:** Scary.

**Harlan Krumholz:** …you’re again, slightly over 10%, slightly more than one in 10, are saying that they think vaccines are full of toxins and harmful ingredients like antifreeze. And not only that, one in six are saying they’re not sure whether they’re full of toxins and harmful. I mean, if you’re not sure about something like this, then you’re definitely not going to take them. I mean, so you’ve got 10% saying this is probably true or definitely true. But then you’ve got another one in six who are really not sure whether these vaccines in general are like this. And so I’m just going to give you my last one here, because I could go over this whole thing and it’s very interesting, it’s from the Annenberg Center, and I’ll just stop after this. But ivermectin, as we just talked about, but I’m just going to get to this [inaudible 00:06:47] “Ivermectin is an effective treatment for COVID-19.” What percent of Americans do you think say that’s definitely false?

**Howard Forman:** Again, probably 50% because it’s so polarized.

**Harlan Krumholz:** Only one in four. Only one in four say that that’s definitely false. And if you say definitely false and probably false, you’re only like one in three. And one in four people thinks it’s probably true or definitely true. And it just is—

**Howard Forman:** We’ve got a problem. Houston, we have a problem.

**Harlan Krumholz:** And a large percentage, a third of Americans, aren’t sure about ivermectin. And you and I have talked about this.

**Howard Forman:** We’ve talked about it a lot, right?

**Harlan Krumholz:** Ad nauseum, right. So they’re obviously not listening to *Health & Veritas*.

**Howard Forman:** Yeah, no, both of us would love if ivermectin worked. I mean, it’s a cheap drug. It would be great. There is no evidence.

**Harlan Krumholz:** So anyway, I’m just saying we’re at this interesting moment. And by the way, this is reflected in our politics as well, where there are people with just very entrenched beliefs that can’t reflect back on facts. And so I think it makes it hard in civil society to convince people of things. And in that article we’re talking about things the FDA can do, but I think that the people who don’t believe these things aren’t going to believe the government either. The government telling them it’s not going to be the way that’s going to work.

**Howard Forman:** Right, no, it’s got to be non-government that comes in to help here.

**Harlan Krumholz:** Somehow. Somehow. I’ll tell you, Travis Kelce, for example, the notable tight end of Kansas City, maybe people would know him because he’s going out with Taylor Swift, I really liked the fact that he’s on the Pfizer vaccine commercial. It’s people like that that I think may turn the tide. But anyway, it was just an interesting.... So let’s get onto our guest. Terrific guest today.

**Howard Forman:** Dr. Melinda Pettigrew is the Deputy Dean of the Yale School of Public Health and the Anna M.R. Lauder Professor of Epidemiology. She will leave Yale in December [to join the University of Minnesota School of Public Health](https://www.sph.umn.edu/news/melinda-pettigrew/) in an exciting new role as Dean of the school. Dr. Pettigrew is renowned for her molecular epidemiology approach to researching infectious diseases and antibiotic resistance. She specializes in diseases of the gastrointestinal and respiratory systems and uses cutting-edge technologies to evaluate questions such as when colonization of bacteria can lead to disease or how changes in microbiota or disruption of homeostasis affect antibiotic resistance.

As Deputy Dean at YSPH and as interim dean at YSPH, she pushed for the financial independence of the school and advocated for diversity, equity, and inclusion measures. She’s an award-winning teacher as well. Aside from her roles in academia, she was also a Public Voices thought leaders fellow as well as a Hedwig van Ameringen Executive Leadership in Academic Medicine Program for Women fellow. She’s part of the Steering and Executive Committees for the Antibiotic Resistance Leadership Group and is an Associate Director of the Scientific Leadership course. So first of all, I just want to welcome you to the podcast, and I want to just point out for our listeners that you are an exceptional Dean at the School of Public Health, and you’ve been an exceptional Deputy Dean at the School of Public Health.

And I’ve been fortunate to actually work with you in many capacities over the years, and I’ll be sorry to see you leave, but I’m also happy to see you taking on this leadership role in Minnesota. The reason why we invited you, aside from the fact that you’re a colleague and that you’re doing this work, is that about nine months ago I did [an outro segment for the podcast](https://insights.som.yale.edu/podcasts/health-veritas/dr-nancy-brown-the-power-of-mentorship) about bills pending in front of Congress to help spur the development of new antimicrobials because of the growth in antimicrobial resistance. And I felt like this is a topic that neither Harlan and I are experts in, and you are. And I wonder if you could just start off by explaining to us what does antimicrobial resistance mean and why do we worry about it?

**Melinda Pettigrew:** Okay. Well, first, it’s important to say that antibiotics are really different than other drugs. And this is because my taking antibiotics, for example, impacts other people’s ability to have an effective antibiotic. So they really should be thought of as a public good. Bacteria become resistant to antibiotics and they can share antibiotic resistance genes, they can transmit antimicrobial resistant pathogens, et cetera. And so antibiotic resistance can spread. And antibiotics are life-saving drugs. And the problem of antibiotics getting resistance is getting worse. And so if it becomes worse and we reach a situation where antibiotics are no longer effective, we won’t be able to treat common infections like pneumonia, surgeries, individuals who are undergoing chemotherapy for cancer will have issues. And so they’re really important drugs, and the problem is expected to get worse unfortunately.

**Harlan Krumholz:** The one thing about this podcast, it gives us a chance when we have guests come in to really dig into their science. In your case, I don’t think I really fully appreciated the advocacy that you’ve had and the depth of the science around these issues. And in a piece that you wrote recently, you talked about this issue about how empiric antibiotics ... so for people listening, oftentimes somebody comes in who we suspect of having a bacterial infection, and we’ll just start a bunch of antibiotics without really knowing what we’re treating exactly in an effort to gain control of the situation, to be able to get ahead of the infection. And oftentimes we really never do figure out exactly what it was. I mean, in everyday practice, but we’re using these quite avidly. And patients I think think that this is the right thing to do.

But you’re saying you think that the day may come soon when actually this doesn’t work anymore. I mean, I’m just extending on your last answer, but I want people to really start understand this because this has been a tried-and-true approach that ... I don’t know, decades and decades. People come into a doctor and they’ve got a coughing hack or maybe someone thinks it may be something that will progress to a pneumonia or it is a pneumonia and they’ll just get a prescription with the presumption that that’ll do the trick. But you’re really telling us that if we keep doing what we’re doing, that that may not work anymore, with devastating consequences. Because now bacteria that we think are relatively benign because we can treat them relatively easily, will now become bacteria that won’t have an answer in our back pocket. We won’t be able to write a prescription because we simply have helped them evolve to the point where they’ve outsmarted our antibiotics. Is that right?

**Melinda Pettigrew:** Yeah. And so one of the things is that one of the risk factors for antibiotic resistance is actually antibiotic use. And this is because the antibiotics put selective pressure on the bacteria to become resistant. And you said two things that I’d like to follow up on. One was this problem or challenge of empiric prescribing, and the other is the duration of antibiotic use. So you all probably were raised ... I heard this from my doctor. It’s really important to finish your medications and take the antibiotics as long as they’re prescribed. And that’s still important to listen to your doctor. I don’t want that message to go out: “Don’t listen to your doctor.” But one of the challenges is that antibiotics were so successful and many of the early antibiotics were developed in the ’30s, ’40s, and ’50s. And this was before we started these rigorous randomized controlled trials and had all this FDA guidance to support their use.

And so the duration of antibiotic use has traditionally been quite long. And so the original thinking was that you had to give lots of antibiotics to just really kill everything and that this would actually suppress resistance. And now we’re learning that it actually may not be correct. We didn’t understand then about the microbiome and all of these other bacteria that are living in our bodies. And so these extended durations of antibiotics can potentially be problematic. And so one of the ways we can tackle resistance is actually to try and [shorten the duration of antibiotics](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8767493/). Instead of seven days, maybe go to three days. Or instead of five days, go to three days.

**Harlan Krumholz:** Oh, my goodness. This is such a big change. And you just said “problematic.” Can you just go a little bit deeper into that? So people hear “microbiome,” just for people’s ... again, not everyone’s familiar with this idea that our intestines are chock-full of bacteria—

**Howard Forman:** Or skin. Yeah.

**Harlan Krumholz:** So go a little deeper into this and also why it’s problematic.

**Melinda Pettigrew:** Yeah. So our body is inhabited by hundreds and hundreds and thousands of ... There are actually more bacteria in our bodies than there are human cells. And so traditionally, when we think about treating an infection, you worry about the antibiotic killing the bacteria that’s causing disease. But antibiotics don’t just target that one pathogen of interest. They target everything that’s there that’s susceptible. And so taking antibiotics puts selective pressure on all of these other bacteria and our microbiome.... We have bacteria that are colonizing our respiratory tracts, our gastrointestinal tracts, and in some cases they’re perfectly fine for us, but if they were transmitted to somebody else, that other person could get an infection. Or you can get an endogenous infection, for example. In the healthcare system, you can be infected by a bacteria that’s colonizing your gut when you have a catheter or a surgery. And so all of this antibiotics are putting pressure on all of the bacteria in our bodies, and we worry about those other bacteria species also becoming resistant. And we’re becoming really ... we’re getting to the point where we really appreciate that challenge a bit more.

**Harlan Krumholz:** One quick other follow-up though, because you’re talking about those becoming resistant, but isn’t it also that we’re knocking out bacteria that are actually good for us? And is that also an issue too? I mean, I know you’re focused on microbial resistance, but isn’t there another side to this too, which is some of the stuff doing good things for us may be knocked out?

**Melinda Pettigrew:** Yeah, absolutely. I’m really glad you brought that up. So our bacteria do many good things. They provide vitamins for us, and they also provide what we call colonization resistance. And so the bacteria in our respiratory tract and in our guts help prevent more dangerous pathogens from gaining a foothold. And so when you knock out the good bacteria, you leave an open ecological niche, for example, for other, more harmful bacteria to come in and colonize. And many of you, I’m sure you know about this, clostridium difficile, right? So C. diff is the number one ... it’s a top hospital-acquired infection. And the risk factor for that is prior antibiotic use because you have a dysbiotic, we call it microbiota, and this allows C. diff to come in and thrive and produce toxins and can lead to a very dangerous diarrhea.

**Howard Forman:** So why don’t we just talk through... we have evidence accumulating about what are best practices. Can you start to explain what are the layers of things we can do to mitigate the harm from antimicrobial resistance? So in other words, I’m thinking one of the things you already mentioned is by shortening the period of time that people take antibiotics, it’s creating less pressure on those bacteria to emerge as resistant. But there’s also, as Harlan said, maybe we shouldn’t be treating some illnesses. Sometimes people have a viral illness and we throw antibiotics at them. We do this a lot in childhood and then we still do it in adulthood. And then there’s the agriculture piece where we use antibiotics separately in farms. Can you just summarize on the demand side, what are the strategies that we can use to mitigate antimicrobial resistance?

**Melinda Pettigrew:** Yeah, the big way we can do it is to help reduce use. And one of the ways we can do that is to shorten the course of antibiotics. And this should really be evidence-based. And there are a number of clinical trials that have been coming out for very specific illnesses that are showing that shorter durations can be helpful. And so that’s one way. The other is that we really need to think about agricultural use of antibiotics. And so about 73% of the antibiotics used in the U.S. are actually used in livestock farming. And a lot of this is used for preventative purposes. And so you have a huge number of cows, pigs, turkeys, just getting antibiotics in their feed for prevention purposes. And this is really to stop stressful conditions on farms. And it’s probably less often that they are actually used for treatment. And so we can reduce the use of medically important antibiotics in agriculture.

We can reduce their use in feed. And the FDA had a [feed directive act in 2017](https://www.fda.gov/animal-veterinary/development-approval-process/fact-sheet-veterinary-feed-directive-final-rule-and-next-steps) that’s proposed many of these solutions. So they banned the use of antibiotics for growth promotion in animals. And so it’s a weird thing, but if you give chickens antibiotics, they grow bigger faster. And so this is a practice that’s been used for decades. It’s just for growth promotion. And so this has been banned as of 2017 in the U.S. And then to try and stop using them as much and instead really think about how we can farm, how we produce animals so that the need for antibiotics is lessened. And so a lot of ... I think about 30% of our antibiotics are estimated to be inappropriately prescribed, and there’s a lot of antibiotic treatment for respiratory tract infections. And this is really a diagnostic issue. So on the doctor’s side, they want to make sure their patient is treated and doesn’t get sick, and there may also be pressure from patients. They go to the doctor, they want to get something—

**Howard Forman:** And parents. Yeah.

**Melinda Pettigrew:** They want to get a pill or stuff... and parents, right. They want to go back to work. And so in many cases, these antibiotics aren’t needed. And so really listen to your doctors. And we’ve got to as a field work on better diagnostics to differentiate bacterial infections from viral infections. And viral infections are ones that were of course .... that the antibiotics may not be necessary or wouldn’t be necessary.

**Howard Forman:** So I don’t mean this to be cheeky about it, but if we were an entirely vegan society, would this have a meaningful impact on antimicrobial resistance?

**Melinda Pettigrew:** I think it’d have to be modeled. I’m a vegetarian, so my first impulse is to just say, “Yes, I would love everybody to be vegan.” But I think reducing meat…. There’s a huge growth in meat, especially in low- and middle-income countries, and the use of antibiotics is not well regulated. And so if we really want to protect the planet and protect these drugs, really thinking about how we raise animals and these huge industrial farms with hundreds of thousands of animals are not the way to go. So reducing meat consumption really can help.

**Howard Forman:** Thank you.

**Harlan Krumholz:** I want to key into the one thing you said there in the end about diagnostic because I’ve noticed you’ve also published on methods that might be able to differentiate bacterial and viral causes of pneumonia and infections. What do you think the prospect of this is? I mean, do you expect that in the next 5 or 10 years, that before starting antibiotics, people will have a test to tell us what they have? I mean, right now people just come in and we write a prescription presuming that we want to at least cover bacteria, if it is, I mean in the case that it is. But will we have more confidence in the future do you think that what’s actually causing your infection?

**Melinda Pettigrew:** Yeah, I mean, there have been a number of trials and a number of new diagnostics that are in the pipelines for development. There’s a place for A.I. and all these predictive algorithms that may be in place. I think we will get there in high-income countries. I’m less confident about the ability... what we really need are rapid diagnostic tests that are affordable, accessible, so that when people come into the office, they can get an answer when they’re there. And I think we’re a little farther away from that, and that’s a long, complicated story about detecting resistance in bacteria. But we’re making progress.

**Harlan Krumholz:** When I think about your legacy, I think one of them will be that you helped shepherd the school through this period. It’s obviously been in motion for a while, but it was really under your leadership that we got to the point where the Yale School became independent. And that’s something I hope that you’ll be proud of because I think it’s a historic juncture in public health at Yale. If you go ahead 20, 30 years and you look back on what you will have done as dean and beyond, what do you think you would like people to remember about what contributions you’ve made? These are ones that you will have made.

**Melinda Pettigrew:** Yeah, I mean, I went to school here, and I will stay and be an actively involved alum. And I will always love the Yale School of Public Health. And I really hope to look back in 10 or 20 years and have everybody think the Yale School of Public Health really is the place to be—after the University of Minnesota School of Public Health, of course. I’m just kidding on that. Sort of. I think—

**Harlan Krumholz:** If you think about what you’re going to do at Minnesota, I really wanted to focus on the future, what’s going to be the legacy of what you accomplish in Minnesota, do you think?

**Melinda Pettigrew:** I think about establishing foundations on which to build excellence. And you can’t make an excellent school unless the foundation is there. And so I feel like my job as Dean is to really highlight the great work that the faculty, staff, and students are doing and to create those structures that really allows them to do their work and have impact on the community. And so there are multiple different ways of having impact, but I want to be able to look back and have people say, “She really had a vision,” or “set up the bones” and “set up the structure for the school to leverage it to be really successful and have high impact and move the needle on public health and education.”

**Howard Forman:** Well you—

**Harlan Krumholz:** That’s great.

**Howard Forman:** I mean, just in the time that I’ve worked with you, which is thankfully a good amount of time, you have moved the needle, you have done great things. You show administrative teaching and scholarly excellence, and we’re just very fortunate to have you come on the podcast before you leave the faculty. And we look forward to having you rejoin us in the future in your new role at Minnesota. So congratulations.

**Harlan Krumholz:** And we wish you the best of luck. Best of luck.

**Melinda Pettigrew:** Thank you. Really appreciate you having me. Thank you.

**Harlan Krumholz:** So Howie, that was terrific, to interview with Melinda Pettigrew. But let’s get to what’s on your mind this week.

**Howard Forman:** Yeah, so look, I live downtown, you work nearby, and so we both know this pretty well. There’s a homelessness problem here, all over the country. Estimates are that over a half million individuals are houseless. Of these, 40% are unsheltered, thus literally living on the street or equivalent. And about 30% are chronically unhoused. They’re more likely to be non-white, male, transgender, and veterans of our armed forces. 25 to 40% have a substance use disorder. 25% are felt to have a mental illness. There are a lot of strategies that are proposed, being tested, or already in use to reduce this problem because it is everybody’s problem.

But given the high prevalence of substance use disorders and mental illness in this population and the fact that homelessness is a direct risk factor for many other diseases, it’s also a healthcare problem. Remember, during the pandemic, the homeless were at the highest risk for COVID in many areas. Many of these patients will not seek care in a doctor’s office, not in a clinic, not in the hospital, until it’s a crisis, or frankly, too late. If you’re unwilling to stay in an emergency shelter, you are unlikely willing to seek care in another institution. These individuals will either not get care or need the care to come to them.

And so I go back to a quote I may have said earlier in our podcast from Hubert Humphrey, where he said, “The moral test of government is how that government treats those who are in the dawn of life, the children, those who are in the twilight of life, the elderly, and those who are in the shadows of life, the sick, the needy, and the handicapped.” So that brings us to the news of the day because as of October 20th, Medicare and Medicaid now have a [code](https://www.cms.gov/medicare/coding-billing/place-of-service-codes/code-sets) and will [pay for care](https://www.aafp.org/pubs/fpm/blogs/gettingpaid/entry/new-unsheltered-pos-code.html) in “a non-permanent location on the street or found environment, not described by any other… code, where health professionals provide preventive screening, diagnostic, and/or treatment services to unsheltered homeless individuals.” So there are many physicians and other providers who already care for the unhoused, but they have been severely restricted, because they can never bill for such services. So to me, this is a welcome change. Happy to see it happen. But it’s a tiny, tiny step for a very, very marginalized population.

**Harlan Krumholz:** And if people want to get a sense of this and the kind of care that people would like to give on the street, I really recommend this book by Tracy Kidder, [*Rough Sleepers*](https://www.penguinrandomhouse.com/books/594500/rough-sleepers-by-tracy-kidder/), that talks about [Jim O’Connell’s mission](https://www.nytimes.com/2023/01/05/magazine/boston-homeless-dr-jim-oconnell.html#:~:text=since%20the%201980s.-,Dr.,Care%20for%20the%20Homeless%20Program).

**Howard Forman:** I remember this.

**Harlan Krumholz:** He was a physician who ... even when I was a medical student, and he was only a couple of years ahead of me, he’s already started this heroic work on the streets really to ... and I say “heroic” because it takes courage and fortitude because there’s so many barriers to even providing this kind of care to people who are in great need. And persistence, persistence and determination. Of course, the people who are really suffering are those people on the street, but Jim and colleagues, this is going on in Boston, have for years provided needed care and just listening to people too. But Howie, with what you’re talking about now, I hadn’t realized before that providing this kind of care was outside the bounds of what would be paid for. And it does sound like an advance, but will it be a commensurate amount of money that will make a difference, that will help incentivize the building of clinics and supporting the efforts that are necessary to care for this population?

**Howard Forman:** Look, it’s a step. I think one of the good things, as you know, you’ve made a career using data to inform policy and collecting that data. This is a first step now. We’ll at least start to even have the data that tells us how many of these encounters are occurring. We have, among us, people that you and I know really well are dedicating their practices to homeless medicine right now. A lot of it is in a clinic, but a lot of them have said to me, “I go out on the street two days a week,” and I’ve always wondered what that means.

**Harlan Krumholz:** David Rosenthal, for example.

**Howard Forman:** David Rosenthal and I believe Dave Chokshi, our former Commissioner of New York City, and I believe Sudhakar Nuti, who is our former student and did a lot of papers with you. Yeah. So a lot of people are doing this. This at least starts the support in a formal way and allows us to collect data and hopefully allows us to make better decisions for the future.

**Harlan Krumholz:** Do you know who was responsible for making this happen? Why did it happen?

**Howard Forman:** I think that the fact that there is now an organization of physicians who do street medicine, they call it street medicine, I think their advocacy has made the biggest difference. And I think California in particular, where the largest homeless population exists, probably was the biggest advocate as well.

**Harlan Krumholz:** So bottom line here is we have to address homelessness in this country. I mean, the fact that we can provide care to people who are homeless, it should shock us to say that there’s so many who are homeless. So that’s the number one thing is fixing this underlying problem. But in the meantime, in the meantime, there are people in need who are homeless. I don’t know how.... Is there even a term that’s evolving out of this homelessness? Isn’t there a new term that people are using?

**Howard Forman:** They like to say “unhoused” as opposed to “homeless” preferably, because a home can be a tent in a park, so we like to say unhoused. And I think it’s really housing insecurity as well. So we shouldn’t just look at the people who are out but people who are in danger of losing their home any day of the week, and sometimes they’re living in their car.

**Harlan Krumholz:** And just to say, we talked a lot about the work that’s going on in North Carolina, for example, and in other places that are focusing on [social determinants](https://insights.som.yale.edu/podcasts/health-veritas/lauren-taylor-ethics-and-public-health). If we want to improve the health of populations, we have to go beyond writing prescriptions, this issue about—

**Howard Forman:** Yeah, housing.

**Harlan Krumholz:** We’re unhoused. The housing insecurity needs to be addressed. But meantime, anyway, I’m just doubling down, saying, I appreciate that this new rule has come into place and that will create better incentives and make more sustainable the programs that are delivering this kind of care.

**Howard Forman:** We’ve got to celebrate some wins. I mean, to me, this is a policy win for the moment. At the very least, it’s going to give us more information.

**Harlan Krumholz:** Yeah, that’s great. Thank you so much for bringing that forward.

**Howard Forman:** Thank you.

**Harlan Krumholz:** You’ve been listening to *Health & Veritas* with Harlan Krumholz and Howie Forman.

**Howard Forman:** So how did we do? To give us your feedback or to keep the conversation going, please email us at health.veritas@yale.edu or find us on any of various social media. Both Harlan and I remain on Twitter, however fleetingly.

**Harlan Krumholz:** Yes. [@hmkyale](https://twitter.com/hmkyale/), that’s H-M-K Yale.

**Howard Forman:** And I’m [@theHowie](https://twitter.com/theHowie/). That’s @ T-H-E-H-O-W-I-E. Besides emailing us, besides Twitter and the podcast, I’m fortunate to be the faculty director of the healthcare track and founder of the MBA for Executives program at the Yale School of Management. Feel free to reach out via email or, for more information, go to our website at [som.yale.edu/emba](http://som.yale.edu/emba).

**Harlan Krumholz:** *Health & Veritas* is produced with Yale School of Management and the Yale School of Public Health. Thanks to our researchers, Ines Gilles and Sophia Stumpf. And to our producer, Miranda Shafer. Incredible. We’re so lucky, Howie.

**Howard Forman:** We are.

**Harlan Krumholz:** Talk to you soon, Howie.

**Howard Forman:** Thanks very much, Harlan. Talk to you soon.