Heart of Safety Coalition

Insights Huddle transcript

May 2023

Health equity as quality

Presenter: Lou Hart, MD, Medical Director of Health Equity, Yale New Haven Health System (YNHHS)
Moderator: Liz Boehm, Executive Strategist, Heart of Safety Coalition

Insights Huddles are a forum for leaders, learners, and advocates to share their bold voices and valuable insights. A mix between a webinar and a conversation, everyone from hospital executives to frontline clinicians are invited to set titles aside and put safety first. We share recordings of the didactic portions of Insight Huddles, and we summarize the discussions in written format. We hope this strikes the right balance between our aim to spread great ideas as far as possible, and our desire to create psychologically safe forums where participants can ask questions and share stories with vulnerability. We believe that together we can spark big ideas and drive meaningful change for the safety and wellbeing of team members across our health systems.

Liz Boehm: Welcome, everyone. My name is Liz Boehm, for those I haven't met. I do see some familiar faces, but also some new ones. I am the lead for the learning community for the Coalition. All of you are part of that group that is health systems that have basically committed to our Declaration of Principles. It means you care about team member safety and wellbeing along three lines, psychological and emotional safety, physical safety, and health justice. Today's conversation centers on that question of health justice, and health justice is one of our intentionally broad categories, which covers both topics such as diversity, equity and inclusion, but also health equity for patients. Because it's our belief that if team members are consistently seeing a lack of equity for patients, that's not a psychologically safe environment for them.

Our guest speaker today is Dr. Lou Hart, who's the medical director of health equity from Yale New Haven Health. We're going to be looking at his work of bringing out health equity as a standard part of safety. Often it is viewed as a separate lens, but it is his view and my view as well that this needs to be part of mainstream safety. Any deviations are deviations in quality, and so we can really integrate it. We are recording today's call and it will be shared with Coalition members. Just a couple of legal disclaimers, we are here to advance the safety and wellbeing of team members, so no discussions of price fixing and that sort of thing, which wouldn't be appropriate for this conversation anyway.

Before I hand over to Dr. Lou Hart, just a little bit of background. Lou and our team met several years back during the Coalition, when he joined one of our insights huddles and was really pushing the envelope at New York City Health and Hospitals around processes to, again, mainstream the idea of equity into quality and safety. At that system, the work that I was so impressed with was actually creating a system for safety reporting that included equity issues, both as a potential factor in root cause analysis, but also as a category of error in and of itself.

Putting that into the RLDATIC system so that it was no longer, again, a separate infrastructure, and that changed the way that he and many of his colleagues were able to look at and report on equity issues.

Either both between patients and team members in either direction, but also between team members and each other in case that came up as well. Lou, I'm going to hand over to you. Thank you so much for being here, and as always, for sharing your wisdom.

Dr. Lou Hart: That is far too kind for you to call it wisdom, as half the time it feels like we're figuring it out as we go along. I really appreciate the relationship, the connection that we've had, the community that you create, the platform that you're sharing with me, and my inclusion in this Coalition to be able to share some of our lessons learned more than anything, and really see, hopefully, there's some pieces of wisdom that we can all pick up, as Liz had mentioned.

There's a lot of content I have, I think it's 25 slides. I don't want to go into, the nitty-gritty of each. I'd rather provide a high-level overview, and then save 15 minutes at the end. If there's a piece that people are a little more interested in or that speaks to your unique circumstance where you're coming from, we can spend more time there. If you notice that I'm glossing over things or really presenting things at a higher level, that is why, just to set that expectation. Without further ado.

The Institute of Medicine in 2002 stated equity is a fundamental pillar of quality, as well as safety, as well as timeliness, as well as patient-centeredness, and a few other efficiencies, but equity is often the forgotten pillar. It's the sixth aim, which is the last aim, which easily and conveniently enough has been the forgotten aim over the past 20 years. It really took, unfortunately, a world pandemic, over a million Americans to die, the murders of George Floyd and others on national TV for us to all realize that us in healthcare have an absolute responsibility to shape this work because we are all collective members of this society.

One thing we do have an abundance of in healthcare is an acknowledgment that we need to provide high quality and safe care. To err is human and crossing the quality chasm came out in the late '90s, where we've acknowledged that healthcare isn't as safe or as reliable or as resilient as we'd like it all to be. It's not just like making widgets in a factory. It's a little bit more dynamic. We had to build these infrastructures of quality and safety systems to ensure we were doing the right things by our patients and that we could have a reproducible and high-fidelity system. How might we be able to leverage and repurpose some of those not designed for equity activities, even though they should have been, to really eliminate some of this unwanted variance from our system to create a better product for all of us, patients, staff and the people?

We're all paying for this in the end. When's the last time healthcare premiums ever went down? Never. We're all paying for this. We have a single-payer health system, CMS. At the end of the day, our tax dollars are paying for this. We're having our salaries deferred and we're getting our insurance from our employers. We're all paying for this one way or the other. It's important that we realize we're all on this journey together.

In terms of disclosures, a couple of quick disclosures. I was a former AMA faculty member and I'm a current IHI member. AMA being the American Medical Association. IHI being the Institute for Healthcare Improvement. I won't be talking about any of their products, any of their offerings, but if you notice similar content on one of their websites, it might be because I was a part of making that as well. No press for a push for either of those two companies by no means, though I am affiliated with them both.

In terms of this discussion of health justice or health injustice, this quote rings just as true today as it did back then, "Of all forms of inequality, injustice in health is the most shocking and the most inhuman, because it often results in physical death." We think of the consequences being probably the most grave, the most absolute. It's actually suffering, the worst types of suffering, early morbidity and ultimately mortality. There's a human element to this work that we cannot forget. These are not just ones and zeros on Excel spreadsheets that we have to record out to our payers and getting docked for payment. These are mothers, brothers, sisters, persons that have a lot of loved ones.

That message is not always the most compelling to all people. Some people say, hey, where does the rubber meet the pavement? Let's talk about money here. In America, I don't think we truly have a healthcare system. This may be a bias of mine being a born and raised Canadian, but I've spent most of my life Stateside. I believe we have a sick care system that's built on a transactional model of payment, a fee for service system, as opposed to a paying for a relationship where, there's a capitated, there's a big pool of money that is spread. Now, as the provider, as the clinician of healthcare, it is my responsibility to serve that patient or to partner with the patient in a way that allows that patient to live their healthiest life. It's almost a bidirectional relationship of equals. My vested stake would be in the relationship and in the longitudinal experience of the patient, as opposed to let me just bill per transaction.

Today in the United States, we spend about $320 billion, there was a recent estimate, in inequities. That's how much healthcare inequities cost us in our United States sick care system. Ultimately, I believe they must be removed. On the left of the screen, this is 2021 data that shows our mandatory federal spending, which is about two-thirds of our federal budget. You can see Medicare and health make up a lion's share of that, with the rest being Social Security and unemployment. The sad thing is, we waste more money on our inequities and the inefficiencies in our health system than we spend on public housing and public education combined.

You can see very small lines for education and for housing and really community development, which is quite embarrassing. If we can eliminate some of those inequities from our healthcare system, we can free up all that money to invest in public schools, to repair roads and bridges, to improve the housing stock, and to eliminate food insecurity in one of the wealthiest nations in the world.

It's just this waste that we all feel so oblivious to or so disconnected from, but at the end of the day, has real consequences for many, and even if we feel it might not directly impact us, I guarantee it has a financial impact on your bottom line no matter how well-situated you are in this system of advantage or disadvantage. Just to give a high-level overview, people say, where's the military spending? Yes, military spending is mostly discretionary. We have to appropriate that every year. Here's our total federal spending in a given year. Again, healthcare and CMS and health taking up around 20% to 25% of our entire budget, which is quite mind-blowing to me. How we can spend so much and have a pretty average or less-than-average healthcare system when compared to other modern, highly developed nations?

Some of the intentional structural solutions that I think we can bring to this work is change management. What's our theory of change? How are we going to motivate? How are we going to see this from an idea to something that we can roll across a health system? We need to talk about how race shows up in clinical medicine. Using this as the shock and awe approach to open people's minds to how there have been insidious things baked into the system that none of us would realize. We are all either not racist or anti-racist, so none of us want to, worsen or believe that we discriminate against patients on the basis of race. None of us would be proud of that fact. Yet, unfortunately, there are many ways in which we do, and a lot of us, especially the clinical folk, remain a little bit naive to that, having practiced for many years and maybe not even realizing what had been happening or what they had been taught because of historical precedent.

How can we leverage those quality, safety and care experience systems? Things that existed long before these newfound prioritizations of equity and of healthcare equity. Really the clinical equity piece, as well as the DEI piece, and ultimately the health equity piece, investing in our communities so that people will become less reliant on medical care and allowing people to flourish in their own communities. Unfortunately, oftentimes, payers don't pay us for that. Again, speaking to the sick care element of our healthcare system. We saw that healthcare made up about 20% or 25% of spending. That means there's 75% of spending that is still outside of healthcare, so we must create cross-sector partnerships to address the groundwater problems of structural inequity.

There are things that show up in multiple layers, multiple different parts of our economy; and if we only address things in healthcare, we will quickly have that groundwater recontaminate healthcare. We cannot just eliminate healthcare disparities in a vacuum or on an island. We need to start to think about who we can strategically partner with from other sectors of the economy to really drive this change on multiple fronts. It's just simple change management, right? Come on, this isn't that hard. Yes, it's our 400 years of American history, and there's a lot of precedent that got us here, and every system is perfectly designed to produce the outcomes it does, so maybe our system was designed this way. Maybe there are structural problems, but this is just change management. This is what we do in clinical quality and safety and clinical operations.

I choose to adopt the Kotter Model of Change. It's eight steps. Some people think it's probably five too many. Probably a human brain can only handle three things, so sometimes it's a little complex. I color-coded it so you can think of it in three key areas, really creating the climate for change, creating the excitement, the opportunity, being strategic around really getting the buzz for change to happen. Showing people how status quo might not be the best and maybe making status quo feel a little bit less popular, less comfortable, and ultimately less profitable to make people a little bit more willing to do it. Hey, I'm happy to change if you make my current day worse. I'm happy to adopt an easier pathway. People hate to be mandated to change, but if you make their current day appear a lot harder and that there's a new opportunity to make it easier, people are mostly willing to do that. Though there are people who just are very resistant to change, and we have to respect that and meet people where they are.

Really engaging and enabling this change within the organization, partnering with people who can do some blocking and tackling downfield, who can engage stakeholders on the board across different senior leadership positions, frontline clinicians, engaging patients to really be proactive in speaking out on these things, talking to their elected officials. There are ways that you can do this within the organization and across, and then really implementing and scaling and sustaining that change over time. This is a model I use. You have to understand your organization, where you're at, how you want to be able to motivate people, what levers you can pull. Every organization is a little different.

I came from a public safety net system, New York City Health and Hospitals, which from a cultural standpoint, we were a safety net. Our mission was to serve all regardless of their ability to pay. It was a different ethos and a different culture there, so it's important to understand where you're coming at. Here at Yale, also very much a service-willing, a service mentality organization, but we tend to be a little bit more intentional when it comes to margin, considering that we want to continue to provide a community benefit, but we're not the safety net system of Connecticut, though there is no other safety net system. De facto we are, but it was not our initial mission, our initial charge in the creation of the organization.

One nice way to tie it to a locus of external accountability. It's not just Lou saying this is important, Lou and a couple of his allies, this is CMS. This is the Joint Commission. This is coming from Health and Human Services. There are external and federal regulatory requirements for us to do this work. The National Patient Safety Goal around eliminating healthcare inequity, that's coming from Joint Commission. We have to get accredited by them every three years, so we really better get a process in place so that we can meet that, otherwise it's going to affect our payment.

From the IPPS in 2023, CMS is going to dock us either a half or a full percentage point of reimbursement, unless we're making these initial commitments, and it's not going to end with commitments. They're going to actually make sure we're moving the needle on certain quality objectives that they're going to pull out of our own electronic medical records. As opposed to wait for that payment to change, that value-based, equity-based payment to be here, we should probably get ahead of that because at some point it's going to have a real financial impact in the hundreds of millions of dollars on our payment, so why not make some very smaller investments up front and hopefully larger over time to be able to not just save costs, but to improve our revenue as well.

Liz Boehm: Lou, before you move off that, I just want to interrupt you for a second, and tell me if you're just planning to get to this later. But you and I had a conversation a while back in which you also were planning to look at some of the standard readmission areas.

Dr. Lou Hart: Yes. I'm going to get to that.

Liz Boehm: Okay. Good. I just want to make sure.

Dr. Lou Hart: Yes. I'm focusing on the external ones to build the sense of the Coalition and the sense of urgency to show why we had to do our internal health equity indicators, but yes, I will totally close the loop on that one, and that was some of the stuff I had to blur out, so we'll get to that in a second.
I've been in the organization about two years now, and by no means am I the only person leading this work. I'm so blessed to be part of so many talented and brilliant individuals, more brilliant and more talented than myself, who are absolutely pioneering in their leadership and in their conviction for this change. I had the opportunity to speak in a senior leadership meeting early on, and this had change makers and those locusts of power across the organization who were attending this meeting, and it started off with just a really innocent polling question. If I want to ultimately stratify our quality and safety data by a demographic identity, we need it to have a good collection of that demographic identities.
There was this deep narrative that we just had bad SOGI data, that we just had bad race, ethnicity, language, sexual orientation and gender identity demographic data for our patients. I said, well, I'll give you a definition. I don't want to count anybody who chose "other," "unknown," that they refused, or maybe left the categories blank. Let's look at our active patients, someone who had one or more encounters in the last five years, no matter where they were in the health system. By 2025, it's my goal that 95% of patients will have a category that we described as socially meaningful, that is not other, unknown, patient refused or blank, but is one of the categories that we believe allow for more, maybe a bit more purposeful stratification and a next step. We don't just want to have data that you don't know what to form the intervention of.

I asked this question, what's the percent? People were like, oh, it's terrible. It's 20%. It's 30%. It's 50%. We just have such bad data collection. I wonder where this deep narrative is coming from? Might that be a narrative that allows us to never have to do the stratification work? If we have garbage in, we're just going to have garbage out, so there's no point in even doing it. When I looked at the data, because we collect race and ethnicity as two separate categories, we did have this race data where we had about 20% or 21% rate of other, unknown, blank and refused. For some reason, ethnicity looked pretty good. It was about 90%. About a 10% rate of, again, other, unknown, patient refused or blank. I said, what if we combined them and created a blended race ethnicity, which is not novel. Many people do this where you have non-Hispanic black, non-Hispanic white, Hispanic of any race, Asian, so forth.

When we did it like that, obviously, we got a much higher completion rate. We got a completion rate of 90% when we actually stratified it like that. I said, might this be an easy way to eliminate our other, unknown rate in half that's still meaningful? It's far from perfect, but there's precedent with CDC. There's precedent with how we do our community health needs assessment. Let's do that to get that one narrative off the table. We then said, well, let's make sure that we're looking at other demographic identities, too. Language, it's a bit higher now. It's about 97%. We still have huge opportunities when it comes to gender identity, sex orientation, sex assigned at birth. That is the work of 2024, but we wanted to get and build the infrastructure for race, ethnicity, language the first year without forgetting that this is a much bigger coalition of the willing that we're trying to join on this mission.

This was how the data looked before. We didn't have a Hispanic or Latino or Latinx category. We just asked race like the U.S. Census does. Separate than Hispanic ethnicity, which is just so curious. That's probably changing in the summer of 2024. You can see we have this much higher rate with other, unknown, refused and blank over 20%. When you have a rate of other at 20%, that would inspire a lack of confidence if you're really going to create a group when other might be the third largest race, other was

the third largest race in our health system. You saw in the prior way, it was white, it was black, and then other was the third largest. The unknowns refused were brought out of that. This simple map allowed us to get to a place where, well, we realized that 2.7% of our Hispanic patients were choosing other as their race, thus implying that their Hispanic or Latin identity was their racial identity.

These are all identities. These are sociopolitical categorizations that the U.S. Census did to track populations over time. These aren't biological categories. I felt more comfortable, since these things are not innately biologic, to present this and to go forward with it. People were really happy. Again, our blank rate is only 1.8%. That means 98-plus percent of our patients have something. We really want to lower this rate of other, unknown and refused. 8.5% was good enough for us to start to continue to advance this work. The other rate, when you broke out unknown and refused, went to about 4%. We went from about 17% other to about 4% other.

In terms of the second polling question, now that people knew we had good data and it was undeniable that we should stratify it. I said, is it our medical policy to provide disparate care to patients based on the race collected in their medical record? We collect this demographic information. Do we use it for or against our patients? Do we treat them differently based on that information that we collected? I would say 99% of senior leaders said no. There was our chief nursing officer and that person said, well, we might. I think that person was being a little bit nuanced in that understanding that it might not be our official policy, but it might be a practice.

I think that was telling because it spoke to what we had-- It might've been because we had a conversation a couple of weeks prior about this presentation I was about to give, but it brought us to this idea of let's have a little bit of a historical understanding, again, to build the coalition, to build that sense of urgency around, where do these racial categorizations even come from? They existed long before the United States was founded. Where does this come from? How is it rooted in healthcare? It really comes down to this—

Liz Boehm: Lou, I'm going to stop you for just a second to answer a question that came up in the chat. Were people allowed to pick multiple categories for those identities?

Dr. Lou Hart: Yes. I'll share a screenshot with these slides that shows our current categorization. We added a couple of new groups. Middle Eastern and Northern African were added as a group. Again, we've consolidated or blended the Hispanic identity. These are multi-select fields. Then we have another choice that allows, right now it's 63 countries of origin, and we're actually going to go up to over 200 countries of origin and tribal affiliations. We're going to give a lot of granularity and people the opportunity to select multiple identities and to provide, I'm not just black, but I'm Jamaican, Nigerian, whatever it might be.

Liz Boehm: Thank you. Appreciate that.

Dr. Lou Hart: Of course. Let's keep this going. I'm happy to answer questions. Call them out, please. The term racism wasn't a term that many people were using in the organization. This was inherently uncomfortable. I had to tread lightly, and I had to, again, meet people where they are. I'm a health equity leader. I need to know that everyone's starting from a different place, and they need to be able to tailor that message so that everyone can live to their fullest potential or to their fullest understanding.

When you start showing pictures like this to senior leaders, you see some people get uncomfortable, some cameras turned off. That's just the nature of the fact. This isn't always people who are used to academic conversations. These are more senior operators and clinical legistitians, people who are making differential decisions beyond academic philosophical, historical understandings. I presented a brief history of race and how it got to be and how it was misused in the past and how it's been propagated forward and how, unfortunately, it still shows up in clinical medicine. People are like, come on, how does it show up? How do we treat people differently?

I was like, let's talk about race-based medicine. Let's talk about kidney function and how we measure kidney function. There's a tool that takes into account your age, your height, your gender, your weight. And gender is flawed. We're actually making some interesting policies around how to report out EGFR for non-binary patients or for patients who don't have what an electronic health record system describes as a reliable sex, who have different inputs demographically, so that we can't assign you a binary sex, male or female. Since this equation requires it puts us in a tough position. We're actually addressing that. It also takes into account your race.

If you're more than 60, you're good. If you're less than 60, you have some level of kidney disease, which most people are like, hmm, I wonder why it includes your race. It came from a study, not a very good study, that had about 200 black patients, and they had different kidney function. In this 1999 study, as opposed to saying this difference is a disparity, and there might be social factors or social drivers of health that might be relating to this, they said this must represent an innate difference between black and non-black people. It must be because black people on average have more muscle mass. They quoted this. It's published, and multiple papers reaffirmed this. Insane notion.

You'd have Arnold Schwarzenegger in front of you, someone with big muscle mass, and then a skinny kid with dark skin. You'd say, well, the skinny kid, I got to give him the black version of the equation. It's just mind-blowing. People are like, we do this in our health system? I was like, let me show you. I'll take a screenshot of what we do in our electronic medical record of a patient here. We report out our kidney function for non-African Americans and African Americans. In this example, greater than 60 is healthy, less than 60 is not healthy. If my patient was black, they have healthy kidneys. If my patient was non-black, they have sick kidneys? I treat them differently. A black patient, I would say, hey, you're all good. Follow up with you in a couple months or I'll follow up with you next year. If you were non-black, which is insane that we've somehow dumped everybody else into black versus non-black, if that doesn't evoke Jim Crow itself, I don't know what does.

We actually would've said, hey, we have to monitor your kidney function more closely. Maybe I've got to refer you to a nephrologist or maybe I've got to start you on a medication like an ACE inhibitor to slow the progression of your chronic kidney disease. This has been going on for more than three months now. We got to do something. Again, we treat people differently on the basis of race. Sounds like separate and unequal care. A lot of lights went off. A lot of clinicians who have been far smarter than me and practicing longer were like, wow, "I didn't even realize that this was built in. I took it for granted. It's just what I was trained in medical school and how I've always practiced." It just speaks to the true nature of this work.

We finally made the change. We really want to use this as an opportunity to educate people, because EGFR is poorly understood, stands for Estimated Glomerular Filtration Rate. It's based on an average. It's a huge variability. It's supposed to be a tool for chronic kidney disease over years. Unfortunately, we make decisions based off it in the acute setting. If you drink two liters of water, your EGFR would change. If you don't eat meat the day before, your EGFR will change. It's a far from perfect tool, but it's good measuring chronic kidney disease over years. It was important for us to educate people on what this tool actually is, but then being very specific around what we were trying to do by eliminating race.

We're not saying that there aren't differences in the kidney function between two groups. We're just saying that they're not innate, that they're not fundamental, that we can do something about it. They are modifiable. We shouldn't just normalize sickness because that's how it's always been. Let's build equations that just factor that in. We hear about this with AI and algorithmic bias. We want to make sure that we eliminate those differences going forward, not just accept them as status quo and build them into our models. It's okay that black patients do worse. That's how it's always been. We use this as an opportunity and published on our own website, on a couple of other external websites. We went to the local media, got a little flag for that about publishing with the school newspaper, because they took a very critical stance on this.

Again, we said, hey, everyone's entitled to an opinion and it might not always make us look good, but we're going to tell our version of the story. We're going to make sure that we're not just responding to someone else's story, but we're telling what we feel about this and what we're doing going forward. We've eliminated this. Again, that built a lot of coalition. A lot of people are eager and willing, and this new office of health equity, what are they doing? They're doing stuff like that. I want to be a part of something like that to change the way we practice medicine. Not just provide some trainings, but actually make some change. Not to say that education isn't important, but education is often thought of as a weak corrective action in quality and safety, because humans are so fickle.

We talked about the flaws of racial biology. We said, these things are vestigial. It leads to stereotyping. It creates separate and unequal care. It's the opposite of personalized medicine and it fosters racial disparities. We, again, we're very purposeful with these pictures that we were showing that are in some of the Yale School of Medicines library. There was about five other algorithms that we were able to get rid of. The use of race in pediatric or neonatal newborn jaundice. When you're assessing for jaundice in babies, we used to take race into account. We no longer do that. When it comes to who's likely to have a successful vaginal birth after an earlier C-section, they used to take in to account your ethnicity or your race, whether you're a Latina or African American, and said you're less likely to have a successful vaginal birth, so you should be more likely to be offered C-section, which if unnecessary, are very dangerous, comparatively.

If you have a high-risk pregnancy, you have to do what you have to do, and it might be the best way to deliver the baby for the safety of both, but it's important to know unnecessary C-sections are not good for anybody. They're very costly for the health system and can be very high risk for the patient. We talked about EGFR. We talked about our work in the kidney stones tool that actually takes into account whether you're black or non-black and treats your likelihood of having a kidney stone differently. How the heck does this make sense? If we all agree, it's not biologic. If it's maybe black people are just passing their kidney stones at home and that's why we don't collect them in the hospital, because they don't trust us to come in when they have lower back pain. They just pass them at home. Because over 90% of kidney stones will pass on their own, though they are extremely painful.

Our next target is around pulmonary function testing. What would be considered normal for an African American, a level of four, would be considered abnormal for a white American. Again, we've accepted lower levels of normal based on race and ethnicity. Mind-blowing when you think about it with a more modern critical lens. Again, what I remember in medical school, I just was like, that's what they're saying. That's what I have to accept. At least now we're being a little bit more critical as we try to construct newer systems of educating medical students and really understanding how we might be treating our patients differently on the basis of race, even though all of us, 99% of us said, no, we don't do that.

That helped build the excitement around this work. Let's talk about what we're doing in equity, quality, safety and care experience. Implementing it into our adverse event analysis. Advancing our QI data analytics to really inform this work, make it a little bit easier for us to identify disparity as opposed to having to do it in a one-off fashion. Then most importantly, utilizing our patients as the expert constituents. We don't need to pay consultants or pay some health equity guru. Why don't we just ask the people who are experiencing disparity what might those key drivers of disparity be and invite them to co-derive or co-direct with us what those root solutions to the problem will be. Let's share some of our institutional power, some of our resources and understand that who stands the most to gain if we improve this. Yes, we might get a little bit of payment, that's a benefit, but it's the patients. If we get this wrong, they stand the most to lose. When we get this right, we all stand the most to gain, but especially the person on the other side of this equation.

Some of us might be more familiar with our safety event reporting process called a root cause analysis. Again, the goal is to identify the root solution. This is a structured problem-solving technique used to

investigate preventable harm events that result in corrective actions, interventions to prevent reoccurrence. We talk about the symptom, what happened. In this analogy, it's what we see at the top of our garden. The root cause, why did this happen? There's obviously a weed that's growing in our garden, we need to do something about it. Then once we have an understanding of some of the symptoms, some of the root cause, and some of those key drivers, I didn't put down pre-emergent, and I don't have good seeding, I don't water the right way. These are the things that lead to this problem. What can we do to identify what that root solution might look like?

These are very common and ubiquitous across health systems. This is something that, interestingly, that we published at Yale. A few colleagues of mine, who are great colleagues and leaders in this work, they changed up their event review process in gynecology as a pilot. This shows their standard process where they collect criteria, they review certain things, and they have this standardized checklist. The idea was, hey, can we use this standardized checklist and maybe adopt a different model where we screen for cognitive bias and we screen for concerns of equity or inequity? Everything, everybody in the room is the same. We just have a new checklist.

On the left was the former checklist, but on the right, we actually wanted to have conversations around the patient characteristics or social drivers of health precipitate or contribute to this adverse event. This isn't for us to fix it right here. That's just for us to take account of patterns that we see. Ultimately, we'll describe in a second what the solution might be. We weren't naive enough to think that we're going to fix it just by asking the questions to each other. Because there's still a huge opportunity for us to better involve patients in the root cause analysis. A bad thing happens, and then we talk to all the involved staff in the event, but we oftentimes don't involve the patient because there's oftentimes a lot of concern from a risk management standpoint of liability. Who probably knows the most about what was happening that day? Were the people washing their hands? Were they actively coiling it? That's why they didn't fall. Probably the patient. We still have a huge opportunity to involve patients. Again, this was an opportunity for us to standardize in a checklist way.

Again, it's far from perfect, but it's a step in the right direction, and I'll show you what this helped us do next. To really understand some of these things that might actually be showing up disproportionately in our safety events, whether they were actually certain social drivers or whether there was internal or external biases that were contributing to these bad outcomes. That when we did it in a one-off approach and we weren't measuring this longitudinally, we weren't able to notice the pattern. Oftentimes we were too close to the problem. This led to what they did. Now we internally report out in the department and we're going to quickly try to spread this across the health system, the types of events that occurred and what equity checklist trigger was positive in that bad outcome.

This was a small pilot. They only reviewed 46 cases. Of those 46 cases, about half of them were deemed preventable, where we deviated from our standard of care. Then of those 24, half of those screened positive for social determinant of health or social driver of health and bias. Not only did we report this out internally, but we published it in the academic literature, so that other people could benefit so that we could start comparing notes and we could say, hey, you do this a little bit differently. Let us evolve our process. Again, it's far from perfect. We lead with humility here. The leaders were like, we just want to get this out, because we made this up and we know that other people are making other things up. The more we can share and benefit from our pool of collective learning, the better off we will be.

Then this led to the idea of, well, what are we doing across all of our health system? Here's a small pilot that's happening in one department of obstetrics and gynecology, but we have a lot of clinical service lines across this health system. This is only happening at one of the hospitals. We have a lot of hospitals in our health system. How might we be able to scale this up in a little bit easier way now that we understand the work is doable? It's feasible that we can do this. It didn't break anything. People didn't resign or quit over this. We didn't increase our amount of lawsuits over this. This is something we can do.

This is where I'm going to start talking about our corporate objectives. You'll see a lot of blue boxes, what is going on. I have to blur out some of the data just because I haven't officially gone through all the channels to approve the sharing of the data. This is something that I'm actively in conversation with my leadership and supervisors around how we can be more transparent with our good and our bad, our opportunities and our success so that we can, again, can lead with humility. There's rightful concerns, unfortunately, in our very litigious country that some of this might expose us to liability. I still think that we have huge opportunities to do the right thing here, which we all want to do, but there's just a process. I apologize that this looks a little goofy, but it'll make sense.

I wanted to start with our corporate objectives, because those are tied to senior leadership compensation. We have certain quality or safety measures that are deemed corporate objectives that the entire organization is moving across. As opposed to just expanding this one pilot to, all right, we did it in OB, let's do it in pediatrics, let's do it in surgery, stepwise, which might ultimately still end up happening. I wanted to attack the problem from both ends. From a top-down and from a frontline to the back of house mentality. Since our senior leaders are incentivized by these corporate objectives, everyone looks at them. There's a lot of data and analytics support. We have senior leadership dashboards. Everyone reviews these on a weekly basis. I said, why can't we stratify those? Because then everybody's going to see, hey, I might've got my bonus this year, but for our Hispanic patients, they didn't meet the goal, but they made up a small percentage of that average.

We still meet the average, but there was a couple, there was a few groups that didn't meet that average. Should we still be proud? Should we still all slap ourselves on the back and say, hey, great work this year. Happy that we're getting our bonuses, even though not all persons were benefiting from our efforts. We built on top of the existing readmissions dashboard, the ability to stratify by age, by payer, by racial identity, and by language. This was all just volume-based. This didn't get to the disparity or the relative risk, the unique risk of each group. This was just talking about absolute risk and really just the absolute volume. I'm just showing this slide just to show you that age, payer, language, and racial identity was what we started off with. They were the lowest lift, by no means easy, but they were the easier. Again, we didn't have the best SOGI data, and we wanted to start with, we had really good race, ethnicity, language data. Let's start there.

All right. Close enough. This is what we built as a racial identity dashboard. This is, again, just a little bit- a deeper dive. On the left, just shows you the absolute volume. Let's say, for example, all the patients who were readmitted in 30 days, 60-something percent were white. Of all the patients who were readmitted in 30 days, 30%-- It just gives you a breakdown. It doesn't give you a percent of who was admitted in the first place, because in this example, African American patients made up about 30% of readmissions. Some people were like, well, see, white patients make up the most amount of readmissions. We should really focus things on understanding that difference. I said, but white patients make up 60% of our patients, but they only make up 60%, in this example, 53% of our readmissions. Black patients make up 10% of our patients, but they make up 30% of our readmissions. There's a relative risk here.

When you're comparing smaller groups to larger groups, you have to understand that you can't just look at the absolute numbers. You need to compare for the different sizes of the group. We created these race-specific, and this is what's called relative risk, where you said, how about I look at of all the black patients readmitted compared to all the black patients admitted. All the white patients readmitted compared to all the white patients admitted in the first place? It took away that difference in group size and allowed you to calculate the relative risk. If one group has a lot of people, one group has a few people. If a few people admit everybody, it's only going to look like a small percentage of the total, but they admitted everybody. That means they have a higher risk. It was important for us to calculate this and show people that there are differences across groups, and it's important for us to look at it relatively, not just based on who contributes the most.

We have the most amount of white patients. It's always going to be that. This also became a problem when we added smaller categorizations like Middle Eastern and North African. When we were breaking down Asian into different countries, really small numbers. Thankfully, we don't readmit that many patients. Really small numbers. Hard to create statistical significance, but at least we can alert ourselves to clinical significance. This was overwhelming to some people because we did have a lot more lines here. I made it a little bit easier for us to look at. What we were like, let's make another visualization that shows this relative risk.

Let's allow people to choose a comparison group. It could be white's not the default. It's whatever group is doing the best. There are some measures where Hispanics are doing better than white patients, but unfortunately there's no measure in our health system where African American patients are doing the best. In this, white is the standard group. White patients are the standard group. They have a 1.0 risk. They have an equal risk, because they are the control group. In our example of heart failure readmissions over the last 30 days for all patients across all sites, Hispanic patients are 1.21 times more likely. 21% more likely. African American patients, 1.15 times more likely. 15% more likely to be readmitted. This we thought was a little bit easier analysis that people- bar charts, it's numbers. We have a little- you hover over this little triangle. It has a little hover to discover so you can learn a little bit. You can look at it in graphical form, or if you want to look at it at the table to understand the math that creates this, but we wanted to create a little bit more analytics.

Again, easy to understand, easy to visualize, easy to explain the story. 1.1 times, 1.2 times greater, just because we thought that would be more helpful, again, as we're trying to change narrative. This all started because of that pilot, a small pilot around event review in OBG, and they wanted to see how they could see these spreads across, and we said, how are we going to measure this across? We built this onto the existing data and analytic platform that already we were using to be able to drive this change. We then said, what are we going to do with this information? We have some colleagues up in Boston that are really trying to address institutional racism, which again, it's not something that many are- I don't know how to say this, are probably thrilled. Again, this is newer. This is a little bit less comfortable. Again, even the use of racism in this organization, but people are definitely committed to eliminating variants, unnecessary variants in clinical care.

I didn't think that we'd be able to do it alone inside the four walls of healthcare. We needed to reach out to patients and show patient and family advisory councils what this data looked like and ask them, how would you want to be involved? If you were of a group experiencing a larger disparity, how might you want us to outreach to you? Do you want us to ask you while you're in the hospital? Do you want us to call you a couple of days after your discharge? Do you want us to ask you in your primary care visits? We used our PFACs almost as the way to pressure test the questions that we would ultimately ask the patients that they themselves experienced that disparity.

We use this slide to understand who we should oversample. If we were going to sample people, we were going to make sure that it was all based on the relative difference or the disparity that we saw. We would oversample Hispanic. We wanted 20% more Hispanic patients than white patients, and we wanted 15% more black patients than white patients. We wanted everyone's perspective, but we wanted to oversample the groups that were experiencing the worst disparity. This led to some really fascinating knowledge around how patients might want to be involved in this process, what outreach mechanisms we might be able to utilize, how we might be able to use our PFAC to voice what acknowledgement might look like and how they can help hold us accountable. Not just us create new metrics that make us look good, but how they can actually say, this is what I want you to do. I want you to put something on the website. I want you to reach out to the patients on my chart. Again, we might not be able to do all of the things that they recommend, but again, it allows for us to share some of that power and not just tell them, here are the problems we want you to fix, but really invite them like, what else are you curious? What other things should we be stratifying?

Again, just to share some of the resources that we have in healthcare and to really level the asymmetric playing field when it comes to knowledge in healthcare and the lack of transparency. This was something that we were really excited about building these kinds of wisdom councils or patient and family advisor councils that already existed. We just purposely selected them based on their zip codes and selected people from those maps that show areas of disadvantage and advantage based on zip code. We selected from our existing PFAC, people from the highest level of advantage, and unfortunately the highest level of disadvantage, which no one had it, but we knew all perspectives were important and we didn't just want to for the PFAC.

For the patients, we reached out to the actual patients who are readmitted. We continue to do that in a process going forward as we continue to screen for about 98% or 92% of all patients last month were screened for social drivers of health who were admitted. We're trying to get that up to 100%. These are the kinds of things over time that are going to help us meet people where they are and not just treat all people like the group that they're lumped into, but to understand the precise things that are driving the differences. The last thing that I want to talk about is really these cross-sector partnerships to address groundwater problems.

We talked about using the existing safety mechanisms around adverse event reporting to understand how bias or social drivers of health might have been linked, might've been correlated, ultimately might've been causative in the bad outcome, so that we can at least measure this over time. We then created a data and analytics platform that already existed and just added some more resources to it to be able to stratify by large grouping that we can now add slices and dices to. We can do intersectionality by gender, race, and payer, by zip code, social driver of health, and this risk factor. It allows us to do a lot of slicing and dicing so that we can-- It doesn't answer questions. It helps us ask better next questions. It helps us know who we need to reach out to and who we need to involve in the root cause analysis process.

I think this is an opportunity that for us to all realize that like, whether we love it or hate it, the electronic health record's here to stay, and as clinicians, we spend too much time on it, more than we probably all like, but let's find ways that we can actually utilize it to drive change. Let's communicate with patients so that they know what to expect when they're in healthcare, this is some of the feedback that we got from our PFAC, and then understand holistically the two-way street that is care experience. It's not just patient experience, it's not just staff experience, it's care experience. These things go both ways, like groundwater flows across the rivers. It's important to understand that people bring their own identities into this work, and how we, if we are ignorant to that, we might actually be driving, or our Swiss cheese model might be incomplete.

This is just a quick example of something called the groundwater problem, and this is really eloquently said by the Racial Equity Institute, they provide some training on this. Again, no disclosure here. It's available on the internet. They talk about how we often talk about differences that exist across population groups and euphemisms. In healthcare, we call it disparities. In education, we call it the achievement gap. In criminal justice, we call it disparate sentencing. In child welfare, we call it disproportionate contact. In money and banking, we call it wealth inequality. At the end of the day, it's the same thing. We're just calling it a different term in the sector of society that we see it, as opposed to recognizing there's a structural problem here, a groundwater problem that flows between all of these systems. At the end of the day, the pattern looks the same across all of these systems.

The black line at the bottom is the one-point times, the referent group here, which happens to be white Americans, and the red line, this isn't over time, this is just by system. African Americans are 1.5 to 7 times more likely to have a bad outcome across health, education, criminal legal system, child welfare, and finance, compared to white Americans. It's not just like these are random things that are happening in healthcare. There's a structured pattern here. As any empiricist, we have to recognize a pattern. If we see that it's not unique to healthcare, this exists across multiple layers of society. One of the worst might be the criminal legal system, but healthcare actually might be one with some of the least variation. We

should be able to- since we have a lot of built-in measurement, we should be able to do something, but we can't do it alone. We need to be very strategic here and understand who might we partner with to attack multiple fronts of the key drivers of disparity here.

This led us to, well, what can we do as a pediatrician? What can we do in pediatrics? I partnered with one of my colleagues, Dr. Ostfeld-Johns, around newborn toxicology, which babies we screen for drugs or for substances once they're born. It's important to know that since that's very subjective, who you think you should screen based on maternal history or parental history and based on whether they've had positive tests in the past, a lot of subjectivity in here. When subjectivity and bias, ingrained bias go hand in hand, it can lead to bad outcomes, which we clearly saw when we were looking at the data. What we decided to do is we need to build a pathway to say what our policy is, who needs to be screened and who doesn't. What we should do with this pathway is we should make it publicly available. We should share it with our patients so that our patients understand what to expect when they get their care at Yale New Haven Health System. It's a care signature.

We were very explicit around who needs urine toxicology. It has no role if there's a concern for in utero cannabis exposure. There's just no evidence to say that it does anything differently or what the risks of in utero cannabis exposure are to the fetus or to the developing baby. There was this strong narrative by social work that we had to do the urine toxicology, because if we had to report if there was any type of substance exposure, we had to report the captive. Then unfortunately, we were often clicking yes to the concern for harm and neglect, and that would automatically trigger a DCF or Department of Child and Family Services referral, and that we were strong about substance exposure alone during pregnancy does not constitute concern for harm or neglect.

We also told our families and our patients and our staff that if we wanted to do this, we needed to get informed consent from the parent. We needed to let them know the risks and benefits of doing this procedure. We are not wards of the state. We're not doing this on behalf of a third party. We're doing this if it's clinically important. If it is clinically important, there is a risk that if it's a positive test, this might come back and hurt you in court, in a legal proceeding to keep your child in a child welfare case. They need to be fully aware of the risks and the benefits of what's happening in healthcare. We do this with everything else. Why not this? Once we actually changed that, it was very simple.

This was the lift. We started socializing this, we put a policy on the internet, and we published this pathway. It fires an Epic. If the mother's chart is linked to the- or the parent's chart is linked to the baby's and their substance use exposure chart, this will pop up in the baby's chart so that it provides clinical decision support. If a patient's admitted with heart failure, we have the heart failure pathway, pneumonia, and it gives you what a standard of care should be. We understand that some patients will need to deviate from the standard of care. It's not cookie cutter medicine, but this is what's expected. For the majority of patients, this should work. For a minority of patients, patients who, again, equity, we need to not just treat everyone the same, we need to treat people based on where they're coming from. This helps us at least have a standard of care from which to deviate. Really, these were the two separate lifts. This is what the data looked like.

A was when we just started talking about this and building coalition. Again, we weren't testing that many, but there was huge variance in who we were testing. We were more likely to test black and Hispanic kids than we were to test white kids. Then when we looked at who was actually more likely to be positive, it was actually the white kids who were more likely to be positive. We were actually doing a harm to white families. We weren't screening them, and you actually don't need to send a test. You just need to ask. If your patient trusts you, you can provide all the resources. You can provide the tailored care, the referrals to substance use disorder, the community health worker consult, the care navigation to really get people linked in to help them on their journey, their battles with addiction. It's important to understand we were missing it because of our subjective bias of who looked like a substance use user, who is more likely to

require this test. We were testing the wrong patients, unfortunately, and had a lot to do with our subjective bias, we believe.

Just talking about it lowered our confidence intervals a little bit. Then when we actually went forward with this pathway, it really almost eliminated to zero, and it has for the past few quarters. This is the difference. There was variation by race and ethnicity. You can see that we were at some points testing about 15% of African American babies and a much higher rate than Hispanic or Latino babies compared to other, compared to white babies. The biggest gap is this African American to white that we noted. When we made the intervention, we saw that all patients started benefiting from this, and then we actually eliminated the variance. That's the biggest success when it comes to equity QI, improve the rate for all and minimize the difference, minimize the variance. This was one of the highlights of work that we did in pediatrics to really change this.

The biggest lift, we asked our Patient and Family Advisory Council, we built a pathway, we put it on the internet, that's it. It wasn't like we had to reinvent the wheel or spend hundreds of millions of dollars to do something. This is something that we could truly do just by sharing data and asking people what we should do. Patient and Family Advisory Council said, it'd be nice if we knew what to expect when coming to the hospital. What if you make a pathway and make it on the internet? We did that. It helped our clinicians, helped our staff be less subjective and have a protocol from which they could decide, and it helped our patients be informed about what we were doing.

This is what it looks like on the website. You can just search it, Yale New Haven Health, Yale Newe Haven Children's Hospital, clinical pathways. Clearly here, we have non-reporting discrimination, and then we have the one in urine toxicology under the well-baby pathway. Again, this is important around what we've done here and what we need to continue to do more of, especially in the safety review one. This comes from IHI. I apologize, I said I wouldn't be discussing any of their content. This is just off their website. This is when the only people who publish what their safety of culture survey or their IHI staff survey looks like, and they actually stratify it by staff demographics so that they can identify that. If we just look at the average, we miss some of the variation that exists, and it allows us to be a little bit more purposeful.

Many of us do this in our health systems, but we don't know what the next steps will be. It's important to understand that just doing it is half the battle, but being willing to explore those maybe more uncomfortable conversations by stratifying the staff experience of doing this work. Again, this work impacts people differently. This is a colleague of mine, Dr. Hollingsworth, out in California, who really was purposeful in adding this identity and trauma-informed approach. Not just asking our patients they're experiencing trauma and their past experience of healthcare, but also asking our clinicians around the burnout and the traumatic experiences, the moral injury that they might be experiencing by having to be a minoritized person. I always see cases that involve minoritized persons getting the shortest end of the stick. This stuff hurts, it's cumulative over time, and it leads to learned helplessness. That, again, leads to a wide open hole in the Swiss cheese model, where you just expect, that's how patients in that wing of the hospital or that hospital in our system get treated. That's what happens when you live on that side of the train tracks.

That type of moral injury is important to understand. We still don't know, now that we're going to start asking- we're considering asking some of our clinicians and the staff involved in these things about their own personal identities, how this is ultimately going to worth, but this was an interesting model that we saw and that we were really excited to think about leveraging. Supporting our clinicians, as much as we're also supporting and delving into these questions with our patients.

Really in our call to action, I'm sorry, I said 15 minutes, we're going to do seven minutes. Really, how transparent can we be in our data, the good or the bad? I was happy to share some of the high level stuff, but again, we still need to think about how we can be more transparent. Should we be putting this stuff

on our internet, at least on our intranet? How can we drive more conversations around? Can't measure, you can't check what you're not measuring, but you're not really going to be that accountable. Transparency breeds and drives accountability. If we're not being transparent, it's going to be a lot harder to move the needle. How much are patients driving internal decisions? They're the most important stakeholders. Don't just pick external consultants to help fix stuff. Why don't we just ask our patients how we might build a better and more reliable system for them? I'm sure they have ideas that will lead to better care and more efficiency.

Can we standardize or personalize? Care standards are good. That's not equity, that's parity or quality. We understand that we need to have some nuance, but we don't want to lower expectations for certain groups. Oh, you're from this group, you do worse. Well, it's expected that you do worse, so let's personalize your care differently. That's not what we want to do either. How to tie internal and external mechanisms to accountability, CMS, Joint Commission, corporate objectives, ways that people are incentivized from the senior leaders all the way to our frontline staff. We're all incentivized by our corporate objectives, so it's a way to drive a little bit more accountability. Then where are those cross-sector partnerships? How might we be able to partner with education, with housing, with, like we did, the Department of Children and Family Services, who were like, we don't need those urine tests. If you just tell us the patients need help, we're happy to provide resources. We don't need a child welfare form of referral to be able to provide someone resources. We don't need those tests, but once that test is ordered, it stays in someone's chart and it biases them for life.

They were very happy and willing to have us educate them on the clinical futility of that test. Then for them, for us to say, hey, we would rather not send it. We send the most urine talks on babies in the state. We don't want to send the most. They were actually really happy to partner with us. They actually wanted to write a paper up with us. This is our call to action. I thank you so much for allowing me to provide that high-level overview. A lot more detail than probably I had time for, but I'm happy to take any questions if we have time.

Liz Boehm: I want to say a huge thank you to Lou, both for sharing this today, but also for the work that you're leading and continuing to share so generously. It's so clear to me that you want to make every system better. I so appreciate that. I hope people saw that connection again between health, equity, and team member safety and wellbeing. I see them as so deeply connected. Lou, I'm sure we will be crossing paths again soon. To everyone who joined and particularly those who asked questions, thank you so much. It's so great to see you.

Thank you to all of our Insights Huddle speakers and participants. We don't share the discussion portion of Insights Huddles publicly, so we can foster a safe environment where participants can be candid and share vulnerable and valuable experiences. Insights from the group discussion are summarized in the recap with supporting resources.

If you have questions about this topic or have an idea for a future Insights Huddle to help improve the safety and wellbeing of team members, email us at heartofsafetycoalition@stryker.com. You can also sign up to join Insights Huddles live on the Heart of Safety website. The views and opinions expressed in this Insights Huddle are those of the speakers and do not necessarily reflect the views or positions of Stryker. Thank you for looking after the safety and wellbeing of healthcare team members

About the Heart of Safety Coalition

The Heart of Safety Coalition places care team member safety and wellbeing at the heart of healthcare. This national community of leaders, learners and advocates ensures that voices are heard, connections are made, and standards are raised to inspire systematic and individual change. The Coalition works to advance the Heart of Safety Declaration of Principles, which intersects health justice, physical safety, and psychological and emotional wellbeing to accelerate transformation. Driven by its mission to make healthcare better, Stryker supports and manages the Coalition. Learn more at www.HeartofSafetyCoalition.com.