

Podcast episode transcript: Michelle Badore and Patricia Saleeby, part 3

Michelle Badore: Hi, welcome to the next installment of our Inside Angle podcast, where we welcome back our esteemed guest, Dr. Patricia Saleeby. Dr. Saleeby is a global health and disability leader, a capability equity scholar, social work advocate, keynote speaker and social work director.

I'm Michelle Badore, International Content Manager here at Solventum. And today we're diving into three powerful WHO classification systems, ICD-11, ICF and ICHI.

If you've ever wondered how these fit together, stick around because this episode is for you. We're going to crack the codes.

Patricia Saleeby: Thank you, Michelle. It's an honor again to be here with you. And hi, everyone. I'm excited to unpack these systems. It's something that's very dear to my heart because I've been working on them for decades. And they're just not codes. They're really the backbone of how we understand health conditions, functioning, and interventions worldwide. There are actually three components of what we know as the WHO-FIC the WHO family of international classifications.

As you mentioned, this includes the ICD, the ICF, and the ICHI, which we call it the ICHI system.

Michelle Badore: Great. So by the end of this episode, our listeners will know what each system does and how using them together can transform patient care and health data.

So let's start with ICD-11 and why it's such a big deal. So first, ICD-11 stands for the International Classification of Diseases 11th Revision. It's the global standard for coding diseases and health conditions. There's a big shift from ICD-10 to ICD-11, and it's about making it all digital first, more flexible, and easier to integrate with electronic health records.

Patricia Saleeby: That's right. It's a dynamic system. For example, the ICD-11 uses extension codes. This enables us to take what we call legacy system, right, and add onto it to make this updated version work.

It captures details like severity, laterality, even social determinants of health. And we have functioning codes in that ICD-11 updated version as well. This means you can code a condition like diabetes with complications in a much more precise way.

All that precision matters, as we know, for billing, for research purposes, and global health reporting.

Michelle Badore: Exactly. Those severity and laterality, things like that, they're using extension codes in ICD-11, a new concept. So this transition from ICD-10 to ICD-11 will require some training. There's a learning curve, but the benefits, better quality and interoperability are well worth it. So ICD-11 will tell us what the health condition is, what the diagnosis is, what the disease is.

But what about its impact on the daily life? That's where ICF comes in, right?

Patricia Saleeby: Yes. ICF stands for the International Classification of Functioning Disability and Health. Instead of focusing on disease or that health condition, and I say health condition, but it can

be all-encompassing, including mental health conditions and behavioral conditions and so forth, the ICF looks at how a person lives with that condition.

And we know Many of us have multiple conditions. So what's happening in our daily lives is often this kind of combined effect, if you will. It isn't just attributed to one particular condition or another. So while the ICD-11 focuses on the diagnosis of diseases, the ICF provides this holistic perspective on how conditions affect body functions, their structures, activities and participation, and the environmental factors, how that factors in in, terms of influencing that condition. And this is all vital information necessary for rehabilitation, as well as things like social policy development.

Michelle Badore: Great. So it's more holistic.

Patricia Saleeby: It absolutely is. And you know, something that I do want to mention. I did a recent [TEDx talk](#) specifically on what if your diagnosis was just the beginning, kind of to this point that you we have ICD codes in this country integrated in our healthcare care system, it's used and every other healthcare care system around the world, but it's so limited to what information it actually conveys. And what really matters to people is how their life is going to be affected, how it is impacted by that health condition and what can be done about it, right? When we think about treatment and intervention, that's where the focus is, is how we can intervene and help make people's lives better.

So this TEDx talk, if you're interested in, really talks about why we need to transform healthcare care to functioning healthcare, care a patient-centered approach so that we can help people increase their health, their wellbeing, and human functioning. So by covering things like body function structures, activities, participation, environment, of course, this is essential for being able to accomplish this.

Let's say a spinal cord injury, take a person who has just experienced a spinal cord injury. It isn't just about that bodily structural, damage to that integrity of the spinal cord system, it's about how it will affect that person's mobility, how it will affect their social participation, and what in the environment will create, unlike, you know, very likely the barriers to that person being able to participate, whether it's school, whether it's in their home environment, work, community. So what do we need to address to make sure that person can continue going on with their daily life?

Michelle Badore: That's really powerful for rehabilitation planning and disability assessment. And I'm definitely going to check out that TEDx talk.

Patricia Saleeby: I think when you, when you read it or listen to it, you'll hear a little bit about my life story. It was the first time I actually mentioned and talked about it in such a public forum about me suffering from this heart condition. And think that's great question.

The idea of, at that time, my health care provider, looking at just the diagnosis only and trying to guide decision-making based on it, rather than really looking at my functioning and, when we think about social policy, what I wanted, what was needed to actually help me continue right my life journey in terms of my academic, my career pursuits. So you'll get a little glimpse in this through my personal stories about why this matters. And I hope it resonates with you, Michelle, and with your audience. So the ICF isn't just you know for doctors and nurses and social workers. It's to help governments and organizations design programs that address real-world challenges, not just the medical diagnosis, but thinking about challenges that are complex, as we know they often are, that take this interplay, if you will, this intersectionality between health systems, social care systems, education systems, economic systems, and so forth.

Michelle Badore: Really fascinating. OK, think we've got conditions and functionings covered. Now let's talk about interventions, procedures.

And now we enter ICHI.

Patricia Saleeby: Yes, ICHI is, you know, we love our acronyms. Stands for the International Classification of Health Interventions.

It's a mouthful, so it's easier just to say ICHI. It's the new kid on the block. It's the most recently developed classification through WHO. And it works on the same foundation. It's all harmonized. So those of us who are, in you know, know about ICD, ICF and ICHI are all harmonized on the same foundation layer. So they work together in concert one another. ICHI helps us standardize how we code and classify interventions, whether they might be clinical, surgical, preventative, public health actions, things like advocacy. They're all included. It's a very comprehensive and robust classification system. So let's take an example.

If a patient receives, let's say, physiotherapy, right, or physical therapy after a stroke, each it provides codes for that intervention. And there's also, as we know, probably a multifaceted intervention approach. We're able to capture those with separate codes. Or let's say there's a vaccination campaign. That's even coded too. So it really helps us compare interventions that happen within a country, between or across countries, and track those outcomes that we can attribute respectively to those intervention measures.

Michelle Badore: Yeah, essential for resource planning and measuring that impact and just thinking about that, just like the other classifications in this WHO-FIC network, tracking it globally.

And that's so essential. So is ICHI a procedure classification, like say, PCS or CPT codes that we have in the U.S.?

Patricia Saleeby: It has some. It has some of those procedures, absolutely, in terms of health interventions. It actually works, like I mentioned, kind of harmonized to the ICF. So there are separated codes and categories, if you will, for interventions that you might make, let's say, on a body system or function, right?

Like some of the things we talked about, and interventions on the environment. So maybe... You know, the clinical professionals will function and focus on maybe the bodily systems and structures and functions, but maybe policymakers would look at interventions on the environment, right?

So that could be things like educational and outreach programs, for example. I already mentioned advocacy, but it could also mean structural changes, let's say, to a facility. So there's a lot of possibilities there to be able to capture this.

It's very dynamic, it's very flexible, but it enables us, as you mentioned, to capture these codes, procedure otherwise that we might also find in like the PCS or the CPT systems, but have it in one area and have it be able to work with, which we know works, the ICD system and the ICF, which we know works in other in other countries.

So not having so much fragmentation, but having synergy between all these systems working together.

Michelle Badore: Great, great. I know you mentioned he's the new kid on the block here. Are people using ICHI now?

Patricia Saleeby: Well, some countries have started to use it, yes. But we're in the process of trying to capture you know use cases and implementation measures.

The WHO is constantly working to be able to do this at a country level and then to share the success stories, if you will. being able to show what is working and what is not working.

We're seeing some interesting work coming out of countries that perhaps don't have legacy systems, right? That are that are just starting, like I'm thinking of a country like Rwanda, for example, that is really building up their healthcare care system.

And they've been able to perhaps more easily implement the entire system, the whole suite of systems, if you will, into their country as a result.

Michelle Badore: Sure. Adoption would be easier for sure.

So I know when I talk about this, the big question everyone really has is how does ICD-11 and ICF and ICHI work together? So I like to think of them as like three different lenses. ICD-11 answers, what's the health condition? ICF answers, how does it affect functioning and participation?

And ICHI answers, what intervention is provided? So to help this hit home, do you have any real world examples you can share with us?

Patricia Saleeby: Absolutely, so let's take another case of a stroke patient. With the ICD system and in the U.S., we use a clinical modification of the ICD-10. Most other countries or many other countries, I should say, are using the updated ICD-11 version, which was, as we have mentioned in maybe a previous episode, an updated version specifically developed for electronic health records. But we have in the ICD system, the code for stroke and the specific type of stroke. The ICF would enable us to document the impairments or limitations to someone's functioning in across life areas.

So we're talking about how it might affect someone who has a stroke in terms of their mobility, which we know is very common, their speech, self-care. And the nice thing is, again, the variability that is allowed through the ICF system, not all stroke patients are the same. And that is the value that ICD-11, we're going to have that same code, but we know people differ.

They differ in terms of their functioning, even with that same health condition. So the ICF enables us to capture what those differences might be. And then we add on each sheet and we're able to document and record the interventions that we use to address those functional limitations. In this case, you know, maybe we're doing physio, physical therapy for the for the mobility issues. for impairments related to speech and language. We would then bring in, the let's say, the speech-language pathologist for speech therapy. We're able to document it as well as perhaps changes to that person's home environment, work environment that might be needed as a corollary relationship to perhaps mobility complications as a result of stroke.

Michelle Badore: Wow, that really paints a complete picture from that stroke patient's diagnosis to the impact all the way through to the treatment.

Patricia Saleeby: Absolutely, treatment and outcomes, right? Because if we're able to follow that individual from clinical setting to real world environments and be able to capture this information, we're able to understand what is actually meaningful to them, understand what is actually effective in terms of that treatment or intervention, right? And what's producing the best outcome. Sometimes, as we know,

What a clinician wants to focus on is different from what a patient wants to focus on. Right? And so this is an opportunity.

I mean, I'm going to give you a story of my own daughter, and I hope I don't start to have some tears here. So I have a daughter who was hit by a car walking home from school. This happened in December of 2023, so somewhat recently. She's a teenager. Right? So we're in the hospital. She had multiple fractures, lacerations. One side of her face was totally damaged and wounded.

And, you know, in the hospital, part of discharge is you have to get up, you have to go to the bathroom, you have to walk, right? And she did not want to. She was coming out of, course, some pain medications and just, you know, in a very kind of saddened state from the accident and the physical therapists and the nurses were trying to explain to her, we need you to get up and we need you to walk just to make sure that she was able to have that functioning. Right.

And, I finally asked her, you know, what do you want to do and, you know, what's upsetting you at this point? And we had covered the mirrors because, you know, her facial lacerations and stuff, but she kept feeling her hair.

And this had been several days after the accident. So there was, you know, blood and dirt and everything in there. And she wanted to wash her hair. And I said, okay, maybe we can get you in the, over here by the sink. And the nurse had said, we have a salon chair.

And this is at Children's Hospital here in St. Louis, you know, salon chair up on the, whatever floor it was. If you can walk, we could get you there and we could wash your hair. And so we called the physical therapist and we all said, okay, let's all, let's all make this happen. That was the motivation to get her to actually walk those steps down the hall in the elevator and into that salon chair.

That's what she needed. And then the physical therapist was able to assess her. The nurse was able to assess her to make sure she was safe enough. She was stable enough to be able to do this. So we need to sometimes change the way we go about things, right, in healthcare care system. And this is the future of healthcare. This is the future of bringing technology and data together with patient user priorities, desires, right?

What they would like to see as well. So an integrated, patient-centered, and actionable system.

Michelle Badore: Wow, what a story. Thank you for sharing. And again, hitting on, you know, how do we drive those outcomes? We have to get creative. It's not just about, you know, this checklist that we've always used.

Let's motivate the patient to help themselves, which will help the doctor, which will help someone else, the whole community, the whole world.

So if we recap again, we have ICD-11 for those conditions. We have ICF for functioning and we have ICHI for interventions.

Together, these classifications provided to us by WHO give us a really holistic view of health.

Patricia Saleeby: Yes, and if you want to learn more, you can go to the WHO website. They have official resources, training. We have a new interoperability hub, so a lot of great educational training resources. And we also do a variety of training. You can reach out to either of us right directly. But start thinking about how these systems can improve the care in your organization.

We're always looking for examples, use cases. So if people are definitely doing and using these systems or plan to we would love to hear from them.

Michelle Badore: Yes, thank you. I totally agree. Reach out to us with your stories, with your questions. Thanks again so much for joining us today, Dr. Saleeby. If you guys have any questions or stories about using these classifications, share them with us.

Thank you.