

[MUSIC PLAYING]

**CHRISTOPHER** I do mostly non-operative spine. But I see ankles, knees, hips, joints, sports, other things. And they wanted me to  
**STANDAERT:** talk a bit about how to think about non-surgical care and how you approach this-- how I approach this-- how we approach taking care of people with back pain. We'll go through that. And then at the end, if we have time, we'll talk a bit about what we're trying to do at UPMC to integrate this a bit more.

So if you look at back pain, I mean, this is a big problem. Anybody who is in practice knows this. So low back pain is the leading cause of disability in people under 45. It's the third leading cause of disability in older adults. 1% of our population is disabled due to low back pain.

That's a huge number of people. And when you really look at the cases, it's like a lot of other medical things. The vast majority of the cost is in a small percentage of the population.

So one of things I always found interesting is these are the numbers I sort of heard all the way through my training. So low back pain very common, 75%, 85% percent lifetime prevalence. I can't imagine somebody goes through life without their back ever hurting. It must be 100%.

Sciatica is very common, 40% of people. If you look at studies of primary care practices, how many patients within a pool of patients in a practice come in for low back pain? They consistently show about 6% or 7% of entire primary care population comes in every year for low back pain.

The standard teaching that's been around since I was 26 is this. 40% or 50% of people are better within a week with acute low back pain. 75% of people with sciatica get better over six months. And 90% of episodes resolve without treatment. So this sounds like, to me, an acute self-limiting disease, which is where part of our problem comes in back pain. This is questionable.

If you follow other data and you look at what happens to people once they theoretically get better, you find very high recurrence rates. Almost every study shows a 60% to 80% recurrence rate within one year for acute low back pain. That's very high. Only 25% of people are really fully recovered at one year from a bad episode of low back pain. If you go to subacute back pain, which is sort of 6 to 12 weeks, at one year, 72% still have pain, and 14% are markedly disabled.

So if I take these numbers, I don't look at low back pain as an acute self-limiting disease. I'll look at as a chronic recurrent disease, which is a very different problem. It's a very different problem to treat, very different approach to how you treat it.

So we can do lots of stuff for low back pain, and we do lots of stuff for low back pain. We can exercise it. This is really hard to do. This is not a beginner exercise. We have lots of pills, we have lots of shots. We can massage and manipulate things. We can put cement in things, we can put new discs in, and we can get a scope just about anywhere you want to get a scope in your spine.

And we do lots of this. This is imaging of the lumbar spine in Medicare for MRI over 20 years or so, to showing this sort of very rapid escalation in use. These curves are identical for everything we do. So here is the curve for lumbar fusions. The curve for opiates looks the same. They look the same.

These are interventional pain procedures, so epidurals and such, [INAUDIBLE] injections. Same thing-- very rapid growth. And if you go to the Medicare data from 2016, there was about one interventional spine procedure for every 10 Medicare beneficiaries, which strikes me as sort of ludicrous. I can't imagine 1 out of every 10 people over 65 needs a shot in their back every year. But that's the numbers we hit.

So does this really help, is this getting us anywhere becomes our problem. So people have looked at this. So what is the benefit of all this? So we've spent all this money. We did all this stuff. What happened to our population? Did we make people better?

If we spent lots of money and did lots of things and people got a lot better, this would probably be OK. But that's not what happened. So Freiburger is a part of a group in North Carolina, and they do phone surveys on people with back pain. And they compared their surveys from '92 and 2006. And they were trying to find the rates of chronic impairing low back pain that was in the population they serve. They mean people with more than three months of pain.

So in '92, they found that 3.5% of the population reported having chronic impairing low back pain, of which about 73% sought care. So 20 years later, after spending all this money we just spent, it went to 10.6% of the population now has chronic impairing low back pain and 84% of them are seeking care.

Similar study by Martin et al published in *JAMA*. They looked at a huge health survey on 45,000 people around the country. Expenditures for spine problems increased by 65% over just 10 years, 8 years. In that same time, the proportion of people with neck or back pain reporting functional limitations also increased from 21% to 25%. And the functioning of those people went down.

So we did more stuff, we spent more money. The rate of the population with impairing low back pain went up, and the functioning of the average person with impairing low back pain went down. These are going in the wrong direction.

Why is this becomes a question. And we're going to do a better job. Why is this? A lot of argument, we get paid to treat pain rather than health. In fact, the more invasive thing we do to somebody, the more we get paid for doing it. It pays a lot more to put things in people than it does to talk to them, unfortunately. So that may be part of our problem.

That same group in North Carolina looked at, like, what we do with people. What do we do with people with chronic low back pain? What is their experience in our system? So again, this is that same survey, 5,400 households. And in 2009, they reported 3,300 households had an adult with a history of back or neck pain.

They did a detailed survey of the 706 who had chronic interfering low back pain. They defined this as greater than three months of pain, more than 24 episodes of pain within the past year, which is a lot, and pain interfering with usual activities. These are people with chronic interfering low back pain. So 706 of them.

Of them, 84% were seeking medical care. And what did they get becomes the question. So these people with pain, when you look at these numbers, keep in mind this is a mean of 10 years of pain. These people have their problems for, on average, a decade.

So of these people, 61% took narcotics in the past month. Of the people taking narcotics, they had higher levels of pain and disability than the people who did not. So the narcotics were not equalizing their levels of pain and disability. There were increased in that portion, that proportion of population.

65% of the people on narcotics had a positive depression screen, compared to 45% of people who weren't on opiates. 26% had narcotics and muscle relaxants, and 18% had a TCA or an anti-epileptic.

On average, they saw 2.7 provider types for 21 visits a year. These are people who had back pain for 10 years. This is what they're doing 10 years out, on average. 46% had X-rays, 32% had CT or MRI. Half of those got a second one. 24% had injections, a mean of four per patient. 21 had manipulation, a mean of 21 visits per patient. 34% had tractions, and corsets, and TENS units.

We went back and looked at the whole group, not just the people who received care, that 706, over half of them had a positive depression screen, of which only 38% took an antidepressant, and only 12% saw a psychologist or psychiatrist.

So when you look at that data, you get the large majority of people with chronic low back pain seek lots of care, and they get lots of care. This is a very politically appropriate statement, I think. The tests and treatments do not reflect the best evidence. That is not evidence-based care that we just saw. There's clearly over-utilization of muscle relaxants, imaging, and passive care modalities, and under-utilization of therapeutic exercise and psychological care.

So as I think about this, perhaps part of it is that we get paid to treat the wrong things. We're paid to treat pain. And we kind of go after that. Part of it is, I think, that we're treating the wrong thing. We think of the problem as pain. But I'm not so sure the problem really is pain.

So a couple of years ago, some other physicians in Seattle, Occupational Medicine Group, wanted me to talk about back pain and how I think about it. And I was trying to think about how do I explain this to you people, this idea that we think we're treating pain, but we're not. We're treating something else.

And as I was pondering this about three days before the presentation, this is what walked into my clinic. These five patients came in the same day. These are what I saw.

This person came in. It was a random day. 60 years old, five years of back pain. He has a segmentation anomaly, so six lumbar vertebrae, a spina bifida occulta. This actually has their pars fractures here, with a spondylolisthesis. And he's got this really dysplastic hypertrophic facet joint there. So odd looking spine with bad arthritic stuff in it.

This person came in-- 72. A month of low back pain. And she had an acute L4 compression fracture here. She has an old T12 compression fracture there.

This person came in-- 70. She has back and left leg pain. She had surgery at L4 five years ago. Probably a fusion, but hard to know exactly what they did. Bad disc degeneration in her spine. She has a degenerative scoliosis on her AP view. She has a spondylolisthesis here at L3-4. And she has a below-knee amputation.

Then this guy came in. So he's 27 with Ehlers-Danlose. And he has low back and thoracic pain. Maybe not too surprising. That's what he has. Pretty good scoliosis-- 75, 85 degrees.

His hips-- if you look, that's his acetabulum. His femur is up there. So his femur has subluxed and is underneath his-- essentially, his gluteal attachment's his iliac crest. So despite this, he can walk a mile or two a day. So he came in.

Then this gentleman came in. 50 years old, a year and a half of low back and thoracic pain. And this is his MRI. He has maybe degenerative disc stuff up here. He's got some arthritic facets-- sort of it. So of these five people, who do you think had the highest levels of pain and disability?

You all know the answer to the question already, obviously. It's this person. Why? If we're really looking at a biological construct, an anatomical pain-driven phenomenon, this doesn't make any real sense. Why is this?

So he clearly has the least impressive imaging. Maybe he has a weak core. I hear this all the time. His glute meat is weak. I don't buy that. I just can't buy it. But the question isn't why does he hurt, the question is why is he in distress? That's the question.

So when I asked the guy, started asking him questions, it turns out this came on after a car accident a year and a half ago. He has a history of chronic fatigue before that. He's going through a divorce. And in fact, the accident occurred on the day of his wedding anniversary one month after his wife handed him divorce papers.

He doesn't sleep well. He never went back to his exercise program after his accident. He is depressed. He seeks out passive care. We'll talk about that a bit. He doesn't like his job. And then I ran out of room. I could have kept going.

So the amazing thing about this is so all those things I just asked about and he told me aren't things we typically acquire readily all the time. We're not asking about how did this occur, or why are you so upset, or why are you sad. But we're asking why do you hurt? And they're really different questions.

And so it took me talking to him to figure all that stuff out, at which point, his MRI really didn't matter to me. That isn't the problem. The curious thing to me was despite all these risk factors for poor outcome with interventions, he was the only one of all those people sent to me for an injection, which also was sort of mind-boggling to me. I didn't do one. It wasn't the issue.

So why is this? So one, pain is not an objective thing. The pain is not a broken femur. Pain is an experiential thing. It sort of lives in people, and it comes from their entire existence and experience. And that's sort of how they express it. This is from a pain manager guy I used to work with years ago, who really described this statement. It's a perception experience. It's not a thing that can be surgically excised or pharmacologically killed.

And if you look at the sort of what happens to people when they have low back pain for a while, all sorts of things happen to them. They get changes in their peripheral and central nervous system. This concept is central sensitization.

They sort of upregulate their ability to experience pain. Their brain changes. If you look at functional MRIs, their brains change. They have mood issues. They have sleep issues. They get out of shape.

Often, their lives kind of fall apart. They're not working, they're not with their spouse, they're not with their friends, they're not with their kids. They're not-- whatever is important they're not doing. They get lonely.

Despite all this, though, we still largely follow the model of a pain generator. And I heard this just days ago at another meeting, people talking about what is the pain generator, which pulls you back to that MRI X-ray question, which didn't really help us when we went through those people.

Is it the disc, is it the joint, is it the muscle, is it the fascia? Isn't that why it hurts? In reality, what we're doing is we're taking a complex experiential phenomenon of pain and translating into a single item. We're saying this is pain.

And I actually had this revelation-- I don't know if it was a revelation-- but it was a few years ago. I was sitting in my office, and I just picked up *JAMA*. And there was an article on opiates and chronic low back pain. It said, well, opiates didn't work very well for chronic low back pain. And I sort of screamed to no one in particular, of course not, because it's not pain.

And it dawned on me that whoever wrote the article didn't really understand. They didn't understand this. It's not pain that we're after. We ask people, what's your pain scale, and they give us pain. We don't ask them how frustrated are you? How sad are you? How irritable are you? Do you think you're suffering? Are you afraid? We don't ask them that, usually. But all that comes out in that number of pain.

So we take this thing, we call it pain, what they report. We don't ask about these other components of it. And I went to medical school. Pain is nociception. It's how we start.

And if you go to how do you treat nociception, we're doctors, right? Medications. That's the opiates. They block nociception, right? Immobilization. So immobilize things that are painful. We inject things that are painful, and we operate on things that are painful. And that's what we do in spine. And I would argue this is a failed model for treating low back pain, thinking of it this way.

So the question, are you really treating pain? And this is what runs through my head when I see people. Is it suffering? Are they suffering? Are they frustrated? Are they sad? Is it loss? Depressed, anxious, afraid? Fear and pain-- very bad mix. This is what I'm getting when they're telling me they hurt.

Interesting, when we go through our data, we're working on how to deal with things here in UPMC. And what we keep finding as we sort through our data-- in people, we find diagnoses of low back pain, and we're finding high correlations of behavioral health diagnoses, which is probably not terribly surprising. High correlations of OA, coronary artery disease diagnoses, and diabetes diagnoses.

And it really made me start to wonder a bit more. I always thought of pain as a biopsychosocial thing and thought about the psychological things. So it made me think of the broader health state, that is it really part of a broader health state and a health problem than just an isolated low back pain in somebody who happens to have heart disease, and obesity, and diabetes, and depression? Are they all one thing?

So when we go to how we think about looking at people with back pain, it's tricky. Imaging and exam, relatively non-specific. They help you some, but not totally specific as to what's going on. Absent red flags or neurological issues. It's really difficult to identify the exact cause of back pain.

This is that pain generator model. It's really hard to figure out exactly what hurts in most people's backs, unless they have a particular nerve and they've got a clear radiculopathy. We can figure that out. L5 is L5 in most people. Not everybody, but most.

So when I evaluate people-- early evaluation, you generally direct this towards screening. You're looking for bad things or obvious pathology, neurologic issues. Understand the driving factors behind what they're really-- therefore, it's really bothering them. And what is in the way of them actually getting better? These are what you're sort of looking for.

So we have red flag things. Everybody, every one of us in the room, when somebody comes in with back pain, we have to think about these things. I do. You guys should. Everybody should. Bad things-- fracture, bad neurologic injury-- which in the lumbar spine, cauda equina or radiculopathy-- or tumor, or infection. And there are a bunch of red flag symptoms out there for all these things.

I had to be a little careful. Surveys of broad red flag screens in a primary care population found about 80% of people had at least one. So if you scanned everybody with one red flag-- night pain, maybe a chill, maybe over 50 or over 70, depending on the guideline-- I mean, it's almost everybody. So you have to always take them in that clinical context.

Yellow flags become a bit more important, actually. This is where you find that the mystery is in the history. We start finding out what's going on with you. But you have to get at different questions to get there, though. You can't just ask them what makes you better, what makes you worse, when do you hurt, when are you better. I ask that stuff, but that doesn't tell me the answer most of the time.

You have to start asking about belief systems. What do they think is going on, how do they approach this, how do they approach pain, how do they approach exercise? Social supports-- are they alone? Are they scared? How does this impact their social structure? Family dynamics?

Some people, for better or worse, the pain facilitates a better family dynamic for them. And if that's the case, it's very hard to get rid of their pain, because their experience in their family would be worse. Work factors. A lot of work factors go along with persisting pain and poor outcomes. Psychological factors-- anxiety, fear, depression. And a history of abuse. But all these things factor into how people do.

I just had a whole talk on their imaging. So I don't have any more images for you. We had a bunch the last talk, which is good, and there's no spine stuff, which was interesting to me.

So imaging. When do you image people? When do I image people? You image per red flags-- high concern for fracture, tumor, infection, bad neurologic injury. You start getting imaging. Personally, I think you image when you need a diagnosis. If I wanted to treat somebody and I really have to get at what their problem is-- do they have a degenerative spondylolisthesis, do they have a disk herniation-- I get imaging, because that's how I find that. And if I can correlate their symptoms to that to help me treat them more effectively, then that's a useful thing for me.

Be very careful with imaging, though. Imaging is not predictive of who will have pain. If you take 100 MRIs and put them on a wall and ask 50 radiologists to find the half of them that have back pain, they can't do it. It doesn't correlate.

If you order an MRI or an X-ray, you have to be very careful, and you have to know what you're looking for. The idea is to correlate what you see to what somebody is telling you. So you may learn too much. So if you MRI people who are 50, the most likely thing you'll find is you're going to prove that they're 50. And they don't like to hear that.

And you need to know what you will do with what you find, whether or not you intend to find it. So if you find that somebody is 50, how do you explain that to somebody? And some of this is the Waldo thing. Are you all familiar with Waldo? The Waldo books?

So I put Waldo up there because when-- this is the issue with imaging, especially MRI. You can X-ray. If you don't know what you're looking for, it is very hard to find it. If you don't know the clinical syndrome in front of you-- the clinical scenario, what radiologic finding would correlate with this-- and you go looking for it, you're going to have a really hard time finding it. If you don't know what a degenerative spondylolisthesis sounds like when somebody tells you those symptoms of it, but you find one, what do you do with that?

So you have to understand, if you're not sure who Waldo is, be very careful about how you interpret imaging. It gets tricky. In part, imaging is tricky because of this. These are images of people who really aren't having acute back pain.

So this is from Jerry Jarvic in Seattle, who I worked with for a long time. He did a study of 150 patients in VA hospital, average age 54. Half of them had never had back pain. None had back pain for four months.

And he MRled them. And he found disc desecration in almost everybody, disc bulging in the vast majority of people, disc height loss in over half of people, and frank disc herniations in a third of people. This is seen over and over again.

Similar study from Bowden from 1990. These people had never had low back pain. And they broke it down by age. So even at under 40, you have disc bulging in over half of patients. By the time you hit 60, 20% of people have stenosis.

Almost everybody has degenerative change in their spine. So everything you find is in the background of this. This is what I mean. You get X-rays or an MRI, and you prove somebody's 50, right? Because they're sort of here.

What this really does is reinforce the idea that sort of [INAUDIBLE] from many years ago. It's more important to know which patient has a disease than which disease the patient has. It is not so much the back as it is the person with the back. If you can't see the person with the back, you may be headed the wrong way.

So in treatment, I think all treatment should be viewed through a lens of optimizing health. And one of the first things-- I was here for a couple of months, and the people at Healthline asked me, what are we doing, what are we doing wrong? And my first observation was I think we're treating pain, we're not treating health.

And the question is, is that surgery going to improve somebody's health? Is this medication a good choice for their health state? If you ask yourself that question, you get a very different answer, and you say, is this the best way to get rid of their pain by tomorrow?

In general-- these are gross generalizations-- if you think something bad is going on, get help. If you really thinks this is bad, call me, call somebody. Get help. Call somebody who does this. If I see somebody with clinical chest pain, I call you, I call a cardiologist. Or even more, if something I don't deal with bad is going on, I go find somebody who does that.

If nothing bad is going on, obviously-- there's nothing obvious bad going on, you're not too worried about that-- the goal is to get people moving as quickly as possible. The longer they sit around, the longer they stay deactivated, the longer they stay away from their lives, the worse it all gets.

As generalities, medications-- use specific meds for specific purposes. Meds do something. Don't use them willy-nilly. If you need to treat sleep, use something to treat sleep. If you're treating inflammation, use something that treats inflammation.

Data on modalities. Movement, walking movement, early activation, manual therapy, PT, manipulation can be helpful for acute, uncomplicated low back pain. Different than chronic pain. but can be helpful on acute, uncomplicated low back pain. There are ways to get people moving.

We have limited data on our interventions in sort of all states, shots and whatnot. Every back pain, especially even in acute pain, fear, anxiety, and passivity-- if that's what you're getting, this is a problem.

I'm going to talk briefly about opioids. A hot topic, obviously, for good reason. This 2016 data, I think, is what, 70,000 people in 2017, or something? No, that's from all [INAUDIBLE]. These are overdose deaths from HHS. 42,000 people in 2016. 2.1 million people had an opioid use disorder in 2016.

And I found this report sort of really interesting from the CDC. It came out a year and a half ago. What it is, it looked at, for people given an opiate, what are the odds they would still be on opiates a year later? And if you gave somebody a prescription for opiates for at least one day, there's a 6% chance that person would still be on them a year later, which is like what, one out of 18, 19 people? By the time you hit six days, it was 10%. By the time you hit 31 days, 40% chance they will still be on them a year later, which is remarkable.

That's the curve. So this is that the day you supply the first prescription on the bottom-- and this is the likelihood, the probability that they will be on opiates at one year. And that's three years. So opiates are obviously problematic. The real issue is they're not particularly helpful in low back pain.

So there are a couple of studies from the ED. In ED, patients given naproxen plus some other medication-- there's no difference in pain or function at one week, if that other medication is a placebo, oxycodone, cyclobenzaprine, or diazepam. Didn't make any difference.

And Krebs just put up the space trial this summer in *JAMA*. And they had 240 patients with monitors. They had low back pain and/or hip and knee OA. And they randomized them to opioids versus non-opioid medication pathways.

And they followed them for 12 months. And at 12 months, there was no difference in pain-related function. In fact, the people who were in the non-opioid group were doing better. They had less pain than the opioid group. And the opioid group had a lot more side effects.

So what they felt was that these findings did not support the initiation of opioid therapy for moderate to severe chronic back pain or hip, or pain from hip or knee OA. So they're not particularly harmful and not particularly helpful. So problematic.

We think about exercise. Big, old exercises that keep people moving. Acute low back pain, you want people moving. Walk, move. Get in a pool. Move some way.

Almost everybody in acute pain can do some combination of walking, getting on an elliptical, getting in a pool, or sitting on a stationary bike. So those four are very low impact, and almost everybody can do at least one of them.

Activity as tolerated. People should move. You really limit better [INAUDIBLE] mobility for acute pain. The longer they're down, the harder it is to get up.

For whatever state you're in, guided exercise is generally helpful, people helping them understand how to exercise and what to do. And giving them something structured to do is helpful. Interestingly, there isn't one particular exercise better than anything other.

We have lots of data on, sort of, is core stability, which is the whole rage in the PT world-- is that really any better than other active exercise forms? And it really isn't. The trick is to give somebody an active exercise that sort of works for them from a physical, psychological, economic access standpoint.

It really begs the question when you look at that. Is it really about motor control, or is it really about locus of control? What exercise really does is empowers people. They get more competent. They get over fear, they get empowered, they start to move. And that's really where the benefit probably lies.

So in the end, how do we help our patients? First, we identify what we're treating. That's what I do when I see people. Is it pain? Is it suffering? Is it disability? Is it depression? Is it distress? I ask all those questions before I even get to is it disc, muscle, posture, or whatever? If I can't clear those other things, I have a very hard time thinking I'm going to figure out it's from bad posture.

You have to understand your patient. What are their belief systems, what do they want, what do they think, what are their expectations? What is their goal? What are they trying to get at? And sometimes they need help with this. Like, is their goal realistic?

And some people, the goal of I want all of my pain gone. If all my pain is gone, my life will be fine. That's really hard to do. I'm not sure that happens. It's really hard to do.

What are the barriers to getting better? To get these things, you have to ask these questions. You just have to ask. There's no other way to get it. In general, as you go through exam, and imaging, and history-- the whole thing you're after, consistency-- does this story make sense?

And I talked to a group of primary care providers years ago. I said, low back pain should make sense. And they just started laughing. Yes, in my world, it's supposed to make sense. All these things are supposed to add up. All the data you can acquire is supposed to add up and explain their pain and disability.

Does the evidence match the story? Does the evidence explain the extent of pain and disability, or does it seem like something is missing? If something's missing, you've got to keep looking.

In general, you direct people towards healthy goals. Foster independence, and keep them away from unhealthy goals. You can buy these online in teal, if you'd like. Where did it go? There it is. Parting gifts for the whole audience. Wouldn't that be great?

And as you do this, several things to keep in mind. Do not tell somebody they have the back of someone 20 years older. Don't say that. It will never leave their head. Don't tell them to avoid anything that hurts. Life hurts sometimes.

You've got to move a little bit. We don't want people with unstable fractures jumping on trampolines, clearly. But you can't say, avoid anything that hurts. Hurt is not harm. Don't emphasize their spine can be fixed. I can fix this for you. That takes all responsibility and power away from your patient and really is untrue. We can't fix these things most of the time.

And don't make them feel like an outlier. This never happens, I never see this. Nobody ever gets depressed when their back hurts for two years. Everybody does. Not everybody, but the vast majority.

So do help them take a broader view, like I'm thinking about your longer term health. I don't think that choice is good for you. We need to exercise. I'm not just worried about your back. I'm worried about your heart, I'm worried about your lungs, I'm worried about your bone density. Help them take a broader view as to what they're trying to do.

Encourage appropriate activity. People with bad knees OA and bad hip OA and scoliosis who have back and knee and hip pain every time they run, you know, maybe running is not the optimal choice for them. Be realistic. They have some work to do. We can't really-- they have to help themselves. We can't fix these things. And it takes some work to get there, and it takes some time to get there. Very few bad things are all better four weeks later.

And allow them to be human. By that, I mean, frankly, it really sucks to have chronic pain. It really sucks to hurt all the time. It really does. And I think anybody, if you strip away their goals, you strip away their friends, you strip away their social structure, you take away their money, they're not happy.

And so a lot of our patients are not happy, and that's normal. They can be unhappy. They can be angry. And I tell them, I expect you to be angry. The problem with anger is it's self-destructive. So you can't live in anger. But to deny it is a bit unfair.

So when do you get help? When do you call someone like me? Red or yellow flags. Something really is amiss here. Pain is not manageable. It's just not getting better. If you think there's something neurologic going on, we should be able to figure that out.

What you're doing seems very rational, but they're just not getting better. You're missing something. Or we as a team are missing something. This is when we start looking for more help. And when things just don't add up. You can't make sense-- I don't understand why they hurt so much. I don't understand why they're so disabled.

So this is a separate concept that I'll throw out there for you all to think about as you ponder this idea of what we do with people and how we treat them. This is how I approach things with people. So I've seen-- I was at Harborview in Seattle, those of you who know. It's a county hospital. I saw the entire scope of humanity, as far as I can imagine, just about, in that hospital.

It was 10 languages a week. It was very poor. It was Seattle. It's uber wealthy. It's a huge scope of people. And people are people. The thing that really struck me is they're all-- we're all the same. Fundamentally, we're all the same.

And there are five things we need to be well, as far as I'm concerned. I sort of direct my treatment at these. We need exercise. If we don't exercise, we don't stay healthy. We need to move. We need nutrition. We are what we eat. It matters.

We need to sleep. We need social engagement. We're social creatures. Being lonely is not good for people. And we need a passion, a thing to pursue, a goal to chase. If you meet somebody who has all five of these, you have a very happy individual, for the most part.

If you talk to your people with long standing pain, they may have none of them. And for anybody in a room, if you stripped away four of these from you, I bet you're not very happy, and you don't present very happy, and you're not real bubbly when you go to see your doctor. Because you're just not happy.

And these are really the goals. My goal isn't so much to absolve somebody of pain. It's to make their life better, which means getting after these things. So I can frame my treatment around trying to achieve these five goals.

And people seem to get this. Patients get it when I say this to them. Because they sort of think back and go, wow, that would be kind of cool. And then you can make it more constructive.

So at UPMC, very briefly, what are we trying to do? We're trying to build a center for spine health. Our pilot is hopefully going to be at St. Margaret's. That's what we're shooting for.

So this is not a pain center. That's not in the name. We're trying to work on this idea that it's about health. So it involves rapid access to a specially trained PT. So we have PTs who are training in advanced spine care. And they're the front line of who they see.

Within the same building, it will be me. It will be PM and R. We'll have psychology, nutrition. We'll have health coaches from the health plan. And we're trying to build a sort of behavioral modification program to integrate people with exercise and other things in their community, so we can get them back into their community being healthy. I'm trying to work hard with the primary care community. We're your partner. We're there to help you with your patients.

We can align with the other specialties. So we can certainly get to surgeons, and injections, and all that sort of thing. Dr. Savasio at St. Margaret's is my partner with this, the surgeon. And we're focusing on active treatment in health. That's the goal.

So in general, much of what we do for low back pain is not really effective or guideline-based, which is where our problem comes from. Pain really is a multi-dimensional phenomenon. You have to think about it that way. Care should be directed towards empowering your patient and overcoming barriers to improvement. And the focus is on their health, ultimately.