

Recorded October 2019. Listen to it here.

GRETCHEN MARCH: 00:04	[music] One of the interesting things about those stages of change is I think as therapists and I think we all try not to do it, but we do it. We kind of come in at the action level already.
ANNOUNCER: 00:15	Welcome to the 8th Annual Stroke Conference, Breaking Barriers, there's more to getting home than walking. In this lecture podcast, Gretchen March of Kessler Institute for Rehabilitation presents Ready for Rehab? using transtheoretical model concepts to optimize outcomes. For more information about Ms. March, read her bio in the program notes.
ANNOUNCER: 00:45	This conference was sponsored by Kessler Institute for Rehabilitation and was a one- day event that provided participants with an understanding of the multi-disciplinary approach to rehabilitation that enables stroke survivors and their families and caregivers to rebuild their lives. Discussion will focus on communication, motivation, spatial neglect, sleep issues, bowel and bladder management, and community integration.
MARCH: 01:14	So today we're going to talk first about people being ready for rehab. So how many times have you been in your center and you say, "Why is this person here?" like what Dr. Adler was explaining? Either the very high-level person, you're like, "They should have gone home." Or the very low-level person it's like, "What are we going to do?" And that happens, right? So we think about that. And we don't want to say we think about it because then we feel bad. Because then we're being bias or whatever. So what I found is I'm a person who loves change, so change is very exciting to me. Doesn't excite a lot of people I know, and it takes a long time to happen. In Dr. Adler's presentation, he kind of went over the length of stay and how it's shortened. And we don't have as much time as we used to with our patients, right? So how can we use a tool that might help us determine who's really ready and where are they on the readiness phase for rehab and change? I have nothing to disclose except that I work here. And the objectives today are kind of to define and understand the transtheoretical model of change. Has anybody heard of this? Younger people may have. I'm older so when I went to school they were working on this probably, so. So apply the concepts to patients in rehab settings: develop a mindfulness regarding where the patient is in the process - and I think this is the biggest objective - and also learning to match stages of change with processes to help optimize their outcome. Because we all want people to get better, right?
MARCH: 02:45	So the transtheoretical model is relating to a model of behavioral change that assesses the individual's readiness to act in a new and healthier behavior. It provides strategies or processes to guide the individual through the stages of change. And it was developed by Clemente and Prochaska probably in the early '80s, late '70s. And it was used mostly in things like substance abuse, smoking cessation, and high-risk health behaviors like HIV, how to help people change high-risk behaviors. So hence the song. The transtheoretical model promotes intentional behavior change, looking at change as a process and not an event. And it's characterized by stages. So we all know that when you make a decision to change, you don't change the next day, right? You change a behavior maybe. So think about yourself. If you've ever tried to lose



weight. You wake up and you say, "Oh, I'm going to lose weight. I'm going to start now, and I'm not going to eat sugar." Right? And that lasts, what--

S?: 03:50 A day.

MARCH: 03:50	probably half a day until something tempts you and then you say, "Oh, I'm so mad at
	myself. I'm going to do it again and I'm going to figure it out." And so you say, "Okay."
	So it's a process. It's characterized by stages of change. And I think this is going to be
	kind of helpful. It was very helpful to me because as therapists, I think therapists tend
	to do this, but they don't realize what they're doing maybe. And maybe we could do it
	smarter and more targeted. And cycling through stages is common. So again, go back
	to the example of losing weight. You do it, you start losing weight, you lose five
	pounds, but you really want to lose 50, and now you're discouraged because it's two
	months later and you've only lost five pounds. The heck with it, "I'm eating ice
	cream." Right? And then you start all over again. You say, "I'm so mad at myself. I
	shouldn't have done that." Okay.

- MARCH: 04:37 So there are some core concepts we're going to talk about, and we're going to spend some time on each one talking about it, are the stages of change themselves, the processes that go along with those stages, then two ideas called decisional balance and self-efficacy. So there are six main stages. There's one called precontemplation, contemplation, preparation, action, maintenance, and termination. Those seem simple, right? And don't worry, we're going to talk about it. You don't have to read it. You can just listen because you're going to get the electronic version.
- MARCH: 05:14 So someone in a precontemplation stage has no intention of changing in the next six months. And you know these people, right? They come in to your center, "I don't know why I'm here. Why are you keeping me here? I'm fine. I want to go home. There's nothing wrong with me." Now you know there is because you did the assessment. And a lot of them don't have good judgment and they don't have good insight. And we have stroke patients who really think they can use the toilet and they get up in the middle of the night and they fall. People with neglect are very common in this, "I don't have a problem." Yet they run into everything when they're moving, right? They can't get themselves dressed. So that's the precontemplation stage. So what can you do if the patient is unaware of the problem? The thing that we can do as clinicians is, we can start to create awareness. So a lot of you probably do awareness training and don't realize you're doing it, but maybe making that part of your goals would be really helpful. Because the more aware they become that there's something happening, the more likely they are to adopt a position that, "Maybe I'll change." You won't move them right into action, right?

MARCH: 06:19 Contemplation is when a person intends to take action in the next six months. So they come into the hospital. They say, "Yeah, I know I have a problem. I got to do something about it, but when I get home it'll all be fine. It'll be fine when I get home." You heard that one? Because that's a big one. They say like, "Oh no, I don't do it like this at home, so I'll be fine." Yet they can't get on or off the toilet, but I'm sure the toilet isn't that much different at home, but the room might be bigger or smaller. But anyway. So they're aware that there's a problem and there is a desired behavior change. They're like, "Okay. I probably should think about this." So we can try to illicit



their perspective. We can try to motivate and encourage them to set goals and make specific plans, right?

MARCH: 07:03	In the preparation phase, they're intending to take action. Now a lot of our people might come to us at this point. They know they had a stroke. They know that things are not the same. They don't know what they're going to do, but they know they need to do something. So people who are there, they're intending to take action. They're your more classic, "Oh, I love having this patient. They're so motivated." Right? They're telling you they want to change. They're telling you they know something needs to happen. So with these people, you can try to do things like negotiating a start date. You can be a little more specific. In the very top one, precontemplation, you don't want to give them big details and you want to express concern for the precontemplation person. "Well I'm a little worried that you don't think there's a problem. Let's see if you can do this," and then they run into something or they trip. When they do something like that, if you give errors a chance to happen, it helps with awareness. But they have to be safe errors, right? Don't walk away from here telling you that I told you to go be unsafe.
MARCH: 08:01	Then we have the action phase and the patient is now practicing a desired behavior, right? So you've taught them something, they're practicing it. And we provide action- oriented feedback, "That was really great. Can you do that three more times? Maybe if you move your arm a little bit more this way, it would be smoother. Maybe if you put the walker in front of you and not off to the side." Those kinds of things. We provide social support and feedback. So you're more of a cheerleader here, right, as a clinician. You're giving them positive feedback and you're pointing out errors if they're not finding them themselves.
MARCH: 08:36	In the maintenance phase they're working to sustain the behavior. So by now, hopefully, they've learned something and they've adopted it into themselves and they want to continue this process. So with people who are quitting smoking for example. First, they don't even think they have a problem, then they decide they're going to quit in six months, then they start working on it. And then they decide, "Okay. I'm at the level. I'm good. But I still need reinforcement." Right? Because they're still a little shaky. So you continue to provide social support. You want to assist with problem solving. "So when you get into this situation where you feel like you're going to go back, you're going to slide back, what can you do?" So teaching people while they're in rehab, some of these skills, I think is really important because if we just do things while they're here and they leave, what's going to happen?
AUDIENCE: 09:22	[crosstalk].
MARCH: 09:24	Right. How many people think their people are doing their home exercise program right now at home? Yeah, right. Nobody rose their hand. See. And I've worked in inpatient, I've worked in outpatient, I've worked in skilled nursing, so. It's a phenomenon, right? But if they knew the rationale behind it and what they were giving up by not doing it, they may be more inclined to adopt it. It would take time though.
MARCH: 09:50	You want to help employ reminder systems and performance support tools and there's a lot of apps and things that we can use now. A lot of people and I'm always
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amazed because my mother had a phone that she kept in her car in the glove compartment, and it was a flip phone. She didn't know the number and I said, "Well, where's your phone?" She goes, "Oh, I only use that for emergencies." And I said, "But it hasn't been charged in two years so nothing's going to ever help you." But I'm amazed here, when I go into someone's room, and they're 85 years old and they got their iPhone and they're talking on the phone. Messages are coming in and I'm like-that's leveling out, the idea that people aren't technologically available anymore. So there's a lot of apps and things that we can kind of review a little bit to help with reminder systems, just the basic things like the reminders on your calendar. But there are some really robust things that can help remind people to maintain their habit and stay motivated.

MARCH: 10:42 Maintenance, we help them form new habits and encourage mentoring of others. So if they've succeeded and they can teach another person that's in the same boat as them to succeed, they're much more likely to maintain it, right? They're declaring, "Hey, I did this. You can do this too." So a lot of our support groups, the stroke support groups, getting people involved with peer mentoring, very helpful in recovery. Then termination, the patient's sure they're never going to return to a former behavior. And in the literature, less than 20% of alcoholics and smokers ever fall into this category. And it's probably true for most people for most things. It may not be practical for the majority of people. So they may cycle between being sure they're not going to do it and they're just trying to maintain it. Being sure [laughter] and just trying to maintain it.

MARCH: 11:30 So now we're going to talk a little bit about the processes that go along with the

stages. So there are experiential things that people go through. So the first one is consciousness raising. So again, that's a lot of awareness, right? If somebody doesn't understand the ramifications of the medical choices they're making, like if they chose not to take their blood pressure medicine. "I don't want to take it. It's too expensive. I take it every other day instead of every day. I share it with my husband." I mean, we've heard all kinds of things, right? So you need to raise their consciousness that, "You're in a pretty good place right now." Maybe they didn't have a severe stroke, but if they don't maintain that blood pressure, they could have a severe stroke. So education becomes an important part of consciousness raising and we don't want to scare them. We want to kind of support them and say, "Hey, you have two choices." We have a constraint-induced movement therapy program here for our stroke patients and when they don't move their arm very well and they're really depressed about it because it's barely moving, we'll say to them, "Here's a plan." We'll lay it out, "But it's difficult, it's challenging, it's annoying sometimes. You don't get perfect movement right away. It takes a lot of effort but you can do it." And then there are people say, "Yes, I'm doing that," and they will. They will stick with it, they'll do it the entire time they're here. We teach them what to do to go home just like we're talking about. So if there's a gap between this place and outpatient or the next level of care. And when they get to the next level of care we say, "Tell your therapist this is what you're doing." We give them handouts and things so that they can organize themselves. People will do it. However, there are people say, "Nah, it's too much work for me. I'm not going to do it." So what do you do in that case? What do you do



when your people-- like you know something's really good for them and they're not going to do it, what do you try to do?

S3: 13:17 Scare them.

MARCH: 13:18 You do try to scare them. Yep. We do. We try to scare them into something, and we try to encourage them and say, "Okay." But we have to remember that we're all people, and people have a right to make a bad decision. So I will usually say, "I see a lot of potential that you could gain by changing this behavior, but if you're choosing not to, I just want you to be clear that you're choosing to stay pretty much where you are in the development of this skill. Because without doing a lot of work for it, you're not going to change the brain to change that behavior." Right? So as long as they're aware and I will continually come back to it, "Do you want to try that today? Do you want to try today? Did you think about it?" But you cannot force people to do things that are good for them if they don't want to do them. But we can help them. Dramatic relief, self-reevaluation, environmental reevaluation, and self-liberation, we're going to go into these in more detail, but they're basically experiencing the emotions around how they feel about the change, right? So people get mad, some people get sad, so we have to let that happen. I'm going to come over here.

MARCH: 14:29 The self-reevaluation is realizing that the change is an important part of one's identity as a person. So you want to identify yourself as a stroke survivor, right? You don't want to be a stroke victim, right? There's a difference in how they view these things. Environmental reevaluation is realizing the negative impact that the problem behavior has on other people in your environment. So if you are very stubborn and you say, "Nope. I had a stroke. This is the end of my life. I'm just going to sit on the couch. I'm not going to do anything. My wife's going to do everything for me," think about the impact on that caregiver, right? So when people go through these processes of change, they can start to evaluate, "Wow. I'm really kind of messing up my family here. This is a lot of work for my caregiver. Maybe I can start to do something different." Right? And then they go through those stages. Self-liberation is making a firm commitment to change. I love that. It's like, "I'm liberated; I'm going to change." And then the behavioral processes are things like helping relationships. So seeking out and using social support networks. Making sure that they're connected so that they don't feel isolated and depressed. Counter conditioning is substituting the recommended behavior for the problem behavior. So if you're trying to not eat sugar, you drink a cup of tea every time you want a cookie, something-- in simple terms. With strokes, little bit more complicated, but the idea is the same. And reinforcement management is increasing the rewards of the positive behavior change and decreasing the rewards for the negative behavior. So a weight-loss example is the easiest. If you want to lose weight and you stop eating sugar and you're starting to feel better and you're seeing a change, every time you see the sugar you think, "Oh, my pants fit better." So you substitute that kind of behavior.

MARCH: 16:15

Stimulus control is removing reminders or cues to engage in problem behavior and adding cues to do the recommended behavior. So this is where some of those reminder systems, fitness apps, things like that, that can help them say, "Hey, you're doing a great job. Stick with it." There are some online, I think, networks where you can actually have a person talk to you. Some of the smoking cessation in, I think, New



York State used to have that, where you could call someone. Alcoholics Anonymous, you have a sponsor. So all those kinds of things. And social liberation is realizing that the social norms are changing in the direction of supporting the health behavior change. So in healthcare, we're trying to look at-- I think we've been trying for probably about 25 years, but we're trying to look at prevention and wellness, right? It's easier to prevent problems and educate people and pay for wellness than it is to pay for catastrophic illness. We're not there yet but that's an example of the social liberation.

MARCH: 17:13 Decisional balance is just basically weighing the pros and cons, so helping someone make those choices. They write up their list, "If I do this, these things could happen. If I do this, these bad things could happen." And self-efficacy is the situation specific confidence that people have that they can cope with something, especially high-risk situations without going back. So once they've started to make that commitment then they're good to go. One of the interesting things about those stages of change is I think as therapists-- and I think we all try not to do it, but we do it. We kind of come in at the action level already, right? Like we assess the person and we have a plan. And the plan is, "Okay, today we're going to do this, this and this." And so without knowing where they are in that stage, if they don't think they have a problem, why does this plan make sense? Why would they work with you? Why do they care? And how many times do people say, "I don't know why I'm doing this." Right? So it's interesting when you think about this kind of work. We don't always cognitively think about what we're doing, we just intuitively do things, right? So I don't think we're doing bad things, I just think we could be more focused.

MARCH: 18:25 So applied research has demonstrated dramatic improvement in recruitment, retention, and progress, using stage-matched interventions and proactive recruitment procedures. So kind of figuring out on your assessment-- when we do an evaluation at Kessler, the OTs and the PTs, I think and speech as well, we go in and we have the general information section, right? You're asking them about, "Where do you live? Who lives with you? How close are you to your kids?" Because sometimes, "Oh, my kids live next door," but they haven't talked in 20 years and you need to know that because that's important, like Dr. Adler was saying, for discharge planning, right? We need to know those things. But you can also use some of these tools to kind of find out where are you in the stage. We always ask them, "What are your goals?" And I think that's an interesting word because as most people in the community don't think in goals, right? It's the healthcare community and real fitness driven people think about goals. Because, "I've got a goal. I'm going to run 10 miles today." But most people in the general population don't think of the word as goals. Goals are like, "I want to be rich and financially stable," or, "I want to own my own house." So when you ask them, "You're in therapy, what are your goals?" They look at you, right? So sometimes asking them, "What are the things you feel you need to do to get home? What's blocking you from going home right now?" And then the person says, "Nothing. I'm perfectly fine." And you go, "Okay. What stage am I in?" Right? That's a different answer than, "I don't think I'll ever get home. I have 25 stairs. I can't even move off this bed." Right? So it's important to kind of try to match-- and I think intuitively, like I said, I think a lot of people do do that, but you didn't know you were doing it in a certain way.



MARCH: 20:09	So how can you assess readiness for change? So when I was getting ready for this talk, I found this great HABITS lab at the University of Maryland, Baltimore campus. And it comes out of the University of Rhode Island Change Assessment or the URICA, and I attached the link in the presentations for you. And what they did was they came up with several different forms. So one form is for alcohol withdrawal and alcohol and substance abuse, one was for smoking. So a lot of the questions are about alcohol and smoking. But then they have one that's called psychology and it has 32 items in it, and all the items are kind of similar. So I gave you a kind of flavor of how this works. And I printed it out and I used it on a few people, and it was really interesting, so. It's free, you can just take it off the internet and try it. But the responses are based on a one to five scale. One is you strongly disagree, five you strongly agree. And the sample questions are things like, "As far as I'm concerned, I don't have any problems that need changing," "It might be worthwhile to work on my problem," "I'm finally doing some work on my problems," "I've started working on my problems, but I'd like help," and, "Maybe this place will help me."
MARCH: 21:23	And since there's 32 questions there's a lot of overlap in the types of questions. If you've ever taken any of the personality profile things and they want you to answer the question, you realize this is the same question they just asked me. So, but it has different choices, so do I pick different with different choices? So what you end up with is little groups like each the precontemplation are numbers one, five, ten. You kind of get a nice score and you can kind of see where they are and then apply some of those helpful tools for the people in that stage to help move them along. Because like Dr. Adler said, people are only here 18 to 20 days, right? So if we wait to figure this out till day seven, they're almost halfway through and we've kind of not really maximized their oomph. And even if maximizing their oomph is getting them to be aware of their problem, that's a huge change, right?
MARCH: 22:22	So it has, like I said, scoring and it has readiness scores and it was pretty interesting. I found it pretty fun to try. And it is 32 questions, so it's a little long for some people, but. So then I looked into some technology ideas and I thought, okay, many are available for exercise and tracking diet and food selections. A lot of people have a Fitbit, people are wearing them right now, right? People have the Apple Watch, the Nike app, the FitnessPal, and they're really good but they don't have a lot flexibility to write things in, right? So if you want to track your food, the FitnessPal is great. It'll tell you how much exercise you did. You log that in. You put in what you ate and then you get a little graph and it's at least by actively doing something in an app, you're committing to admitting you're cheating, right? See when you do it right, good things come out, but when you know you you go to push the button that I ate one cookie, and you're like, "Well I really ate three." And I'm like, "Okay. I have to put three, because now I'm just cheating myself." Right? But it's true. So I mean, just the act of if people are technologically capable, introducing these things in your therapy sessions to help them set up reminders and things like that can be helpful.
MARCH: 23:37	Then I went online and I found a lot of things in the App Store. And the very last link there is a blog that had 6 Apps for Tracking Habits and Creating Behavior Change, and some of these are in there, but they're really kind of fun. Some of them are most of them are free because you can do the free version or the paid version where you



don't have to watch an ad, but it's okay. But the habit tracker, you can actually then write in what your habits are going to be, take my blood pressure medicine every day, walk for 30 minutes three times a day, whatever you're going to do. That would be great, wouldn't it? There are some things like Way of Life allows you to set up negative goals. So some people are more driven toward what they shouldn't do as opposed to what they should do. So that's also important to know what's reinforcing to a patient, right? Sometimes I'm better if I say, "Don't eat this food," as opposed to, "You should eat this." So it depends what works.

MARCH: 24:36 There's one called Piggyjar which allows you to track all your guilty pleasures like time-wasting websites and things. It'll just keep track of how much time you're spending on things that you don't want to spend time on. Habitica was one where they gamified it. So they made it like a little game, and you get all these little rewards and emojis. So for the right person-- that wouldn't be good for me. But for the right person, they might enjoy getting that feedback. And Upkeep is a good one. It helps set reminders for mini to-dos in your life like change your oil in your car or fix your heating and air conditioning filter. So are clinicians using this knowledge? Looking at strategies to assist in self-directed change, knowing where that person's starting from. What kind of information are they giving you in that eval, and how can you make that assessment in your evaluation quicker and better and more consistently? Because I think there's some people when they're really giving you trouble, you just keep digging, right? And the people who are okay, but not great, we just let that slide sometimes because they're okay, right? But we want excellence at this point.

MARCH: 25:45 Active listening, so really listening to what they're saying to you. So the example of the patient who says, "Yeah, my kids live next door," but then you find out they haven't spoken in 20 years. But you don't find that out until two weeks into the stay when you're getting ready to send them home and say, "Can your family come in?" "Oh no, they can't come in." So really being a little more inquisitive about, "What's the relationship like? Do your kids work?" I usually start with, "Do your kids work?" Because then they'll say, "Yeah, I'm not going to bother them." So not bothering someone is different than not talking to someone. So it's good to find that out. Trying to look at matching the stage that they're in with the interventions that you're doing. So instead of going in with an action-oriented mindset and saying, "Okay, this is great. I just saw this. This is what we're going to do. I've got a great plan." But if they aren't aware that there's a problem that needs to be fixed, you have to factor some of that into your plan as well. So awareness training and learning how to set goals and write goals for awareness training is really key to success because they'll do whatever you say. How many times have they said, "You're the teacher." Right? You hear that? And I'm like, "No, not really. You're the teacher of yourself and I'm here to help you learn that." So it's a different kind of way of thinking. And trying to use some assessments like the one that I found to determine the stage of readiness. So if you've never really thought about it and you look at that survey, it's kind of interesting what you might find, so.

MARCH: 27:14

Another thing you could try is asking three crucial questions like, "What have you tried so far to make progress towards your goal?" And again, with the goal word, your problems, what you need to do to go home, because we have sometimes on our



	satisfaction surveys it says, "Has your rehab helped you met your goals?" And then they don't write anything related we tell them every day about their goals. We know we're telling them about their goals. I hear the therapists saying it, I say it, nurses are saying it. And then they get that piece of paper and the word goal is on there and they're like, "No, because I'm not 100%." So now we need to look at that. But look for a laundry list of attempts to achieve goals may indicate that they're not in the action stage of change. If they're telling you, I've tried this, I've tried this, I've tried this, I've tried this, I've tried this, they're really not at that action level yet. "What do you think has held you back from getting the results you want?" is another good question. So excuses and blame on external factors like, "I don't have enough time. It's not convenient for me to exercise my arm," may also indicate that they're not in that action place. "How likely would you be to work on your goals every day next week, on a scale of one to five, one being not a chance and five being 100%?" So it's designed as a reality check and it may be in an action stage but may not be as committed as they're telling you. Like, "Oh, yeah, I really want to do it," but then they're not likely to do it, so.
MARCH: 28:42	So I wrote a few patient scenarios for us to think about. So MS is a new evaluation for rehab services. He states, "I don't know why I'm here. I want to go home tomorrow. You people are keeping me here." So what stage would he be in?
AUDIENCE: 28:53	[crosstalk].
MARCH: 28:54	Yeah. Precontemplation, for sure. PK comes to therapy every day. She states she knows that after her fall she's not allowed to do certain activities and she thinks she'll need to change her home setup, but she has no intention to change it at this point because she doesn't want to ruin her bathroom; she just redid it. Where do you think she is?
AUDIENCE: 29:13	Contemplation.
MARCH: 29:14	Yeah. Contemplation. She's thinking about it. She's on the right track. CW, when evaluated for rehab, clearly states his intention to work hard and learn as much as he can to improve. He's researching ways to improve use of his hemiplegic arm and started practicing in his room every night after therapy. So just by seeing that profile, it puts in light how, "You see? You already know this, but you didn't know." So I put this up here. We can talk about it more at the panel, but just thoughts for the future. Did any of this was this helpful? Do you think that you're doing it, but you didn't know you were doing it? You're not sure? Because that's how I felt when I finished. I was like, "Oh, I think I could use this." Alright. And there's the references. You're done. [applause]
ANNOUNCER: 30:00	[music] For more information about Kessler foundation, go to kesslerfoundation.org. Follow us on Facebook, Twitter and Instagram. Listen to us on Apple Podcasts, Spotify, SoundCloud, or wherever you get your podcasts.