a little bit of research and quality improvement and spend a lot of time in the outpatient clinic. So, thank you. I'm glad to be here.

01:55-02:15

Liz Olson: Fantastic. It's great to have you. Let's start with some of the most common barriers. I'm curious. In your work in the clinic, what are some of the most common barriers that you see from patients when it comes to adhering to their medication or perhaps even understanding what could be a very challenging new diagnosis of ASCVD?

02:16-02:46

Dr. Hwang: Yeah, that's a great question. And you know, in a lot of ways, I think really the deck is stacked against us when we're trying to help our patients. And my patients are trying to do their best and adhere to medications, particularly when it comes to statins, because there are a couple of things here that make it somewhat unique in my mind. So, when people are high risk for cardiovascular disease, they might not have any symptoms at all. So what we're doing as health care providers, we're asking them to take a medication every day that doesn't change how they feel.

02:47-03:26

Dr. Hwang: It doesn't change how they function. And we're trying to prevent something like a heart attack that may or may not happen in five or ten years. And then the only positive feedback that the patient may get is they may see their LDL go down a little bit when we check labs, but that type of feedback really isn't that frequent or may not be very meaningful to a lot of patients. And then you add the concern for side effects that a lot of people are concerned about because they hear about it in the media or from their friends and family. And it's pretty easy to see why many people, they might not ever fill their first prescription for statins, or even if they do, they might not take them as they're prescribed.

03:26-03:57

Dr. Hwang: So, when we compare it to things like treating high blood pressure, where you can measure blood pressure every day and see an improvement, or you're

Recorded: March 2023

dealing with so many other medications that statins will move back to like, at the bottom of the list, or the back of the line in terms of their own priorities.

06:13-06:34

Dr. Hwang: And then, like I said again, the feedback is not very frequent. They take a statin, and they may feel muscle pain, or they may feel nothing at all. There's not much positive feedback. And yeah, I think those are the things that I've heard and seen in the literature. Those are some of the conversations I've had with my patients about statins.

06:35-07:00

Liz Olson: I'm curious. Statins is the first step, more or less, in starting to treat with medication. I'm wondering, do you see similar barriers or maybe more pushback as the disease progresses and maybe they need to be escalated to a different class of medication, maybe all the way up to a PCSK9? Are there, are there additional barriers that come as the disease gets worse, or are they more resistant to statins?

07:01-07:41

Dr. Hwang: Well, we see it both ways. I mean, in terms of disease getting worse, I think the thing that we can track is the cholesterol levels and the LDL. And we can show that to patients. And so that in one sense, is disease getting worse. Or they may develop diabetes, and they start accumulating more risk factors for ASCVD. So, sometimes bringing that in and showing patients the benefit of taking statins as they have more and more risk factors, sometimes that's helpful. But if you're talking about the disease getting worse as in finally manifesting itself as unfortunately a heart attack or a stroke, then we're moving into secondary prevention.

07:42-08:19

Dr. Hwang: And, you know, I think that patients are a little bit more amenable to taking things if we are trying to prevent a second event from happening. I hope that answers the question. I think...I have had the experience where let's say they try diet and exercise and the LDL is not improving, and the HDL is not improving. Then some patients do understand. Yes, it's something that they probably are not realistically going to be able to improve on their own. Maybe there’s a big genetic factor. There is a limitation to what diet and exercise can do. And some people do understand that. And they finally say, "Yes, I'll take the statin now."

08:20-08:47

Liz Olson: Great. Thank you. I want to talk a little bit about health literacy, and maybe how that impacts a patient's understanding of their condition. If you could just give us a brief overview of what health literacy is, for anyone, if we have any patients listening. What that is, and why that might be important to understanding your condition and complying with recommended lifestyle modifications and medication.

08:48-09:19

Dr. Hwang: Yeah. So, this is always a challenge, health literacy. We see patients of varying health literacy. And that health literacy basically means just their capacity to understand their own health, general health conditions—the risks and benefits of either preventive measures or interventions that their health care providers may provide and may recommend. And we as providers need to be always aware of the health literacy of our patients and not make assumptions.

09:20-09:57

Dr. Hwang: And some people understand some things very well, but they don't understand other things unless we sit down and spend some time discussing with them. So I think as it relates to ASCVD, I think the challenge is looking at the whole patient, you know, the patient as a whole person. Not just looking at the LDL. Not just the blood pressure, the glucose, not just their BMI or family history. We are putting it all together and helping them understand that when we're recommending medications like statins, we're trying to incorporate all of those risk factors and see if someone is at high enough risk to benefit from taking a statin.

09:58-10:28

Dr. Hwang: It can be a little bit of a tricky conversation when you tell a patient that, yes, their LDL is 90 and that number is good, but you should still be on a statin for reasons X, Y or Z. They have diabetes or things like that. And that takes some extra kind of time to discuss and explain. But patients will understand. Not everyone, but a lot of will understand that. And they might appreciate that we're not just treating a number. So it does require some time and effort to go through these things with the patients.

10:39-11:01

Liz Olson: So thinking from the provider's perspective, how can you set up your office and your systems so that patients are supported as they go through this lifestyle modification? Are there certain types of patient education that are beneficial to put together? Are there certain triggers that should happen to make sure when a patient is

thing. I mean, we don't have really that much time in an average primary care visit to do extensive counseling on diet and exercise. So, if there is a health coach or a nurse case manager or dietician, somebody else who can step in, even if it's a phone call after the clinic or give some printed information; I think that really helps. Because really, when we're trying to help patients make lifestyle changes, I often feel like, you know, a word from the doctor may help, but some people need a little bit more support and education. More than we can provide in a 15-minute primary care visit when we're trying to address other things as well.

12:31-13:44

Liz Olson: So in that same train of thought, how might you incorporate in your processes, patients who were referred from the ER who had received a diagnosis of ASCVD or elevated LDL?

13:45-14:15

Dr. Hwang: Well, good question. If we're talking about patients that we weren't aware that they had a high LDL, you know, maybe they're new to the clinic and referred only after an ER visit, then it's best if we have some type of system in place where we can get the information rapidly from the ER, from hospital discharges where we're being referred patients who need primary care. If we're aware of them, we can get them into clinic. Start some education, treatment, referral to a specialist, if need be.

14:16-14:53

Dr. Hwang: This whole area of transitions of care is really important. The ERs are also overloaded, and they can't really be expected to do chronic care management. And even if someone's been in the hospital for something, you know, the follow-up care is really important. So we need to have systems in place where there's people communicating or electronic systems communicating back and [illegible] care is [illegible]

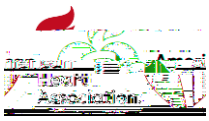
Dr. Hwang: If we're not all in the same EHR, it could be challenging to make sure that patients get appropriate follow

17:15-17:45

Dr. Hwang: You know, if someone's juggling ten or 12 copays for medications, it'll be all too easy for them to skip the statin if they're trying to pay for other medications as well. With regards to transportation, that's always been a challenge, especially for the older folks. They have to rely on caregivers, family members, community resources to get them in and out of clinic. If there's any blessing that comes out of the COVID pandemic, maybe one of them is that doctors and clinics have learned how to do telemedicine.

17:46-18:16

Dr. Hwang: And a lot of us have been forced now to offer that. We've always wanted to, but now the timeline accelerated. And a lot of us have been able to do that. And it's been great for patients who know they don't necessarily need to come in just for a visit. They can talk with a doctor over video, and it does alleviate that transportation



Dr. Hwang:

Recorded: March 2023

Dr. Hwang: So, you know, a patient comes in. Let's say it is the patient who was diagnosed with a very high LDL, or they were in the E.R. for chest pain. And they're found to have ASCVD or very high risk. And they're now getting primary care for the first time. Maybe they were diagnosed also with diabetes and hypertension, dyslipidemia, all at the same time, very common. We don't necessarily need to pile on everything at that first visit. It can be really overwhelming with the patient. And so, in terms of shared decision making, I like to ask them, "What are the things that are most

no side effects. Once they understand that, and they experience for themselves that it wasn't causing the side effects that they thought they were. But if the patient and doctors decided together that that statin is not the right thing for them, for whatever reason, switching to another one can help—ones that are metabolized differently, that might have a lower risk of side effects or lowering the dose going every other day.

23:59-24:42

Dr. Hwang: Those are all good strategies. And then some people, they just, you know, you just end up determining with them that the statin is just, any statin, is not going to work. And so then we start talking about other medications to lower cholesterol. They may or may not lower cardiovascular risk. You know, there's more research to be done, but at least they do lower cholesterol in some patients. So those are things, I think, that are helpful when we're trying to work with the patient as a team to lower the ASCVD risk. So about lifestyle, one thing that's interesting is that research has shown that when people do start blood pressure medications or statins, some of them do tend to slack off on lifestyle issues like diet and exercise.

24:43-25:14

Dr. Hwang: They may feel like, well, they've got a medication now, so they're "protected." And they can kind of slack off. I mean, it it's not too hard to understand that type of reasoning. I think it's just basically human nature. But there are a couple of studies that have shown that. For example, one study showed that people were started on these BP or statins, BP meds or statins. They started to gain weight, and they slacked off on their physical activity. Whereas people who weren't prescribed statins, they maintained those things.

25:15-25:26

Dr. Hwang: So that's always something to keep in mind. We still want to help the patients stick with their lifestyle management even after they start a statin.

25:27-25:33

Liz Olson: Well, Dr. Hwang, thank you so much for this very interesting and important conversation. I really appreciate speaking with you today.

25:34-25:35

Dr. Hwang: Thank you. My pleasure.

25:36-25:53

Liz Olson: This has been ASCVD perspectives. To learn more about managing ASCVD