

Mayo Clinic Podcast - Dr. Cheryl Khanna

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📅 Wed, 3/24 8:52AM ⌚ 11:08

SUMMARY KEYWORDS

ophthalmology, patients, mayo clinic, ocular, disease, mayo, providers, clinic, safe, khanna, develop, vision, technology, pandemic, artificial intelligence, today, virtual, department, treat, practice

SPEAKERS

Dr. Cheryl Khanna, Dr. Sanj Kakar, Narrator

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- N** Narrator 00:00
Coming up by Mayo Clinic Q&A,
 - D** Dr. Cheryl Khanna 00:02
Some people will go many, many years and really not need much treatment at all for their ocular disease, and other patients need intervention at an earlier stage to avoid visual loss as permanent.
 - N** Narrator 00:14
And to help determine the best care for patients with vision problems, Mayo Clinic's department of ophthalmology has enlisted the help of artificial intelligence.
 - D** Dr. Cheryl Khanna 00:22
We can organize this data and develop mathematical models that can say, okay, if you're this person and you have this disease, at this stage, what's your risk long term?

D Dr. Sanj Kakar 00:34
Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Sanj Kakar. Over the past year, healthcare workers in all specialties have had to take precautions to protect themselves and their patients to prevent the spread of Coronavirus. ophthalmology is a practice that typically requires providers to get close to their patients to examine and treat their eyes. So how have they managed during COVID-19? joining us to discuss this today is Mayo Clinic ophthalmologists and chair of the clinical practice. Dr. Cheryl Khanna. Dr. Khanna welcome to the program.

D Dr. Cheryl Khanna 01:02
Thank you. Nice to be here.

D Dr. Sanj Kakar 01:05
So as we've talked about with the coronavirus pandemic, and especially with ophthalmology, and how close you get to your patients, how things changed in the last year?

D Dr. Cheryl Khanna 01:14
Well, it has been a year of change. And it's been a year where we've learned how to focus on the delivery of care, using different approaches. Thankfully, in ophthalmology, we have continued to see patients in the clinic and perform our ophthalmology surgeries. And we've we've managed to do that throughout the entire course of the last year, which is amazing. We've had great leadership that's allowed us to do this. And I really think that Mayo is a wonderful place to receive care and a safe place, given the work of all of our teams.

D Dr. Sanj Kakar 01:52
So as you said, in your practice, a lot of patients, for example, need regular checkups, and maybe maintenance injections. How were you able to pivot in terms of the practice to see them and treat them safely? such that, for example, that what their vision wasn't affected?

D Dr. Cheryl Khanna 02:10
Yeah, it's an important question. So we were able at the beginning of COVID, we develop teams of providers, because we didn't want everyone to be ill at the same time. And so we

would rotate our teams into the clinic and into the operating rooms, while the other providers would provide care virtually. And in this way, we were able to keep, you know, social distancing, and decrease the volumes of our patients. As the year progressed, we worked up to our regular volumes, both in the clinic and the operating room. So dividing in teams really helped us keep everyone safe. We learned how to keep both our our patients as well as our employees safe that Mayo Clinic by using many different techniques. So of course, we use masking of social distancing, we also developed different shields that were created through our own 3d modeling clinics, for all of our instruments and different technologies that we use here in ophthalmology. And so that really helped, you know, create an additional barrier between ourselves and the patient to keep both of us safe. Sometimes we would sit patients further back in the in the exam room, we also allowed people to have limited visitors, although currently two visitors are allowed at Mayo Clinic for the exam rooms are fairly small. So if we can limit visitors in the exam room, which we try to do that even today. So these are some of the safety measures that we took, in addition, 85% of our staff opted to have the COVID vaccine, which has definitely increased the safety of our male environment.

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Dr. Sanj Kakar 03:54

So, you mentioned about virtual appointments, pre-pandemic, how were you using virtual technology? And where are you at?

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Dr. Cheryl Khanna 04:03

The difference is really night and day. So virtual technology was used a little bit for patients who were not able to reach us that were, you know, coming from a long distance, or maybe we needed to have some guidance for their local provider. So it was occasionally used, but really now it's part of our daily practice. And so, you know, we may have a face to face visit initially with someone and then we may, you know, follow up with them in a few months virtually. So, we've incorporated virtual appointments into many different sub-specialties in ophthalmology, it's worked really well. It's been very important to keep patients, for example, patients with macular degeneration, safe where we can do some screening we can develop a protocol for them to follow but they don't need to see the provider maybe every single visit and we can touch base virtually Or they can get their testing or a procedure and then leave. So we're doing a combination of in person and virtual visits. And I think that's really helped to keep everyone safe.

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Dr. Sanj Kakar 05:11

Well, as you as you've been saying, safety is critical, and the Department of

ophthalmology and Mayo Clinic has done a wonderful job in doing that. But did you see patients, for example, who are nervous at first to come in and have a detrimental effect their vision?

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Dr. Cheryl Khanna 05:27

That's a great question. I think, you know, in the last year, everyone's been in a different spot, you know, some, some people are really worried about COVID, and other people really don't. And then we have patients with many different risk characteristics. So some people have other diseases that put them at a higher risk for problems if they did contract COVID. So everyone's comfort level was a little bit different. I think the main take home message is that, you know, if you have decreased vision, if you have an ocular disease, it is a safe thing to do to come to Mayo Clinic and receive care. And if you postpone treatment, there may be irreversible vision loss that you really don't want to encounter. So, you know, follow up in the department of ophthalmology, it's a safe place, we've made many, many adjustments to keep both our patients and the providers safe. And it's worked. I've worked throughout the pandemic, and I'm one of most of us really, who have been safe, without contracting any COVID, you know, for ourselves or our family. So it is a safe place to receive care. And if you have an ocular condition that needs attending to, I think you should really come from appointment.

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Dr. Sanj Kakar 06:48

So in terms of ocular diseases, we've learned, for example, with COVID-19, other areas in the body that it becomes susceptible and new diseases have been seen. Have you seen that in ophthalmology?

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Dr. Cheryl Khanna 07:01

You know, there are some manifestations of COVID in terms of ocular disease, such as conjunctivitis, where the eyes become red and such, but really, thankfully, the COVID has not had much of an impact on ocular disease in terms of directly affecting the eyes.

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Dr. Sanj Kakar 07:19

Now aside for COVID-19, what else is new with them department of ophthalmology that you'd like to share with us today?

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Dr. Cheryl Khanna 07:27

So it's an exciting time and the Department of ophthalmology, we have a new chairperson, Dr. Sophie Bakri, who's has amazing energy and expertise. We have a lot of clinical trials going on, including things like gene therapy trials for macular degeneration and retinal dystrophies. We have we have other research involving keratoconus, we're looking at minimally invasive glaucoma procedures for patients with glaucoma. We have new cataract technologies emerging where we address different desires of the patient to see both near and far correct astigmatism just to name a few things. So it's a very exciting time that apartment, we're also learning how to use information that we've accumulated over many years to predict which patients are at higher risk for ocular disease. And we can, you know, triage those patients appropriately.

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Dr. Sanj Kakar 08:29

With a kind of that's what I wanted to ask you about. I know you're a pioneer with artificial intelligence. And so can you tell us a little bit about your interest in this area and what you're hoping to try and achieve?

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Dr. Cheryl Khanna 08:39

Absolutely. So we're very fortunate Mayo Clinic that Dr. Farrugia has organized our data and Mayo Clinic so we can really allow this to benefit our patients. So we can use the knowledge that we've accumulated for decades. And using artificial intelligence, or some people call it deep learning. We can organize this data, develop mathematical models that can say, Okay, if you're this person, and you have this disease at this stage, what's your risk long term? And do you need to be treated? You know, with drops or laser or surgery? What is your risk over time? So it really is about treating populations of patients appropriately. Some people will go many, many years and really not need much treatment at all for their ocular disease. And other patients need intervention at an earlier stage to avoid visual loss that's permanent. So it's about using information that we've accumulated over many years in a very careful way at Mayo Clinic to benefit our patients now and in the future. So we're very excited about those new mathematical models that we can use with our data.

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Dr. Sanj Kakar 09:53

Oh, sure. Oh, that's that's fantastic. Is there anything else that you want to share with us today that we didn't touch upon?



Dr. Cheryl Khanna 10:00

I think I would just like to stress that Mayo is a very safe place to receive ophthalmology care. And don't hesitate to seek attention if you do have blurry vision or you need ongoing treatment for ocular disease. Because we really don't want anyone to suffer from visual loss that could have been treated.



Dr. Sanj Kakar 10:25

Thanks to Mayo Clinic ophthalmologist and chair of the clinical practice Dr. Cheryl Khanna, for joining us today. Thanks so much, Dr. Khanna,



10:32

Thank you so much for having me.



Narrator 10:33

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