

### Session 3: Genetic Services in Pennsylvania

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00:20:24.270 --> 00:20:32.910

Kimberly Kelly: I will go ahead and get started, and we'll watch for more people coming in, as we go along.

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00:20:34.380 --> 00:20:49.110

Kimberly Kelly: Welcome to the third session in the webinar series on genetic services in Appalachia, and we ask that you mute your microphone so the talk in place any comments or questions in the chat box.

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00:20:49.950 --> 00:21:09.300

Kimberly Kelly: While our speakers are talking and there will be time afterwards for discussion. We ask that you not record our session. We will be recording this session and providing a transcript on our webinar website, and we're happy for you to go back and listen to anything that you might have missed.

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00:21:10.350 --> 00:21:20.940

Kimberly Kelly: So if you missed any of the earlier sessions, they are available; so we're happy to have your engagement with that. We also have some evaluations.

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00:21:21.450 --> 00:21:36.870

Kimberly Kelly: If you haven't completed those previously, we would be happy to have you complete the evaluations on the previous sessions, just to give us feedback and also for funders and, as you may be aware, this series has been funded

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00:21:39.000 --> 00:21:49.410

Kimberly Kelly: by the AHRQ the Agency for Healthcare Research and Quality, and they have enabled us to provide this session and also

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00:21:50.520 --> 00:21:57.390

Kimberly Kelly: allowed us to bring in some great speakers from around Appalachia and that are doing work in the Appalachian area.

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00:21:58.530 --> 00:21:58.860

Shenin: <fire alarm>

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00:22:04.410 --> 00:22:06.570

Shenin: <fire alarm> oh sorry.

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00:22:08.940 --> 00:22:11.340

Shenin: there's just a warning, playing on my end; disregard that.

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00:22:14.580 --> 00:22:16.500

Kimberly Kelly: Hopefully, Shenin's

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00:22:18.180 --> 00:22:21.090

Kimberly Kelly: Building isn't burning down and well.

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00:22:23.160 --> 00:22:24.540

Kimberly Kelly: Because that would be terrible.

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00:22:25.710 --> 00:22:37.560

Kimberly Kelly: But yeah so, as you know, our aims include to develop a research agenda for genetic services in rural Appalachian in particular and each month

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00:22:38.040 --> 00:22:47.640

Kimberly Kelly: we will be having and have had speakers who are working in genetic service provision in medically underserved populations of the focus on

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00:22:48.270 --> 00:23:01.260

Kimberly Kelly: research and a research agenda for rural Appalachia and again we will request your feedback at the end, and hopefully be able to get some more information from you.

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00:23:02.880 --> 00:23:17.550

Kimberly Kelly: So I'll introduce you to our speakers Ms. Shenin Dettwyler and Julia Stone, and Shenin received her Master's of Science in genetic counseling from the University of Michigan in 2016.

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00:23:19.170 --> 00:23:34.740

Kimberly Kelly: She has five years of clinical experience and previously worked for the cancer genetics program at Michigan Medicine and University of Pittsburgh Medical Center and so that's how we became involved, and Shenin has has been

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00:23:35.910 --> 00:23:41.220

Kimberly Kelly: One of the folks who was very early in the process and, as we were trying to

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00:23:42.750 --> 00:23:51.780

Kimberly Kelly: figure out how to best address service provision in Appalachia. So we appreciate her continuing engagement.

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00:23:52.740 --> 00:23:53.580

Shenin: happy to be involved.

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00:23:55.560 --> 00:23:59.310

Kimberly Kelly: She recently transitioned to a research focus position.

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00:24:00.390 --> 00:24:06.270

Kimberly Kelly: at New York University's Langone Pancreatic Cancer Center, and I'm hoping, I said that right.

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00:24:06.690 --> 00:24:07.140

Shenin: Yes.

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00:24:09.060 --> 00:24:09.750

Kimberly Kelly: Julia Stone

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00:24:10.770 --> 00:24:14.580

Kimberly Kelly: will also be speaking, I believe that they're going to

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00:24:18.720 --> 00:24:21.240

Kimberly Kelly: trade off throughout the session.

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00:24:21.630 --> 00:24:32.460

Kimberly Kelly: So I'll go ahead and introduce her as well. Julia Stone received her Master's of Science in genetic counseling from the University of Pittsburgh Graduate School of Public Health in 2018.

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00:24:34.080 --> 00:24:43.410

Kimberly Kelly: Years of clinical experience and prenatal cancer and adult genetics program through the University of Pittsburgh Medical Center to.

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00:24:46.590 --> 00:24:57.960

Kimberly Kelly: Clinical genomics laboratory where she is primarily involved with the workflows there hereditary cancer gene panels and whole exome sequencing so with that.

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00:24:59.070 --> 00:25:05.400

Kimberly Kelly: We, we are very happy to have you join us and we'll turn it over to Shenin.

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00:25:06.270 --> 00:25:12.030

Shenin: Thank you, and should, I share my screen with the slides are we having you advance the slides on your end.

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00:25:14.370 --> 00:25:17.160

Kimberly Kelly: And I would be happy for you to share.

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00:25:17.190 --> 00:25:17.670

Shenin: Sure, Okay.

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00:25:18.960 --> 00:25:22.500

Shenin: Let me get that pulled up then, all right.

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00:25:43.740 --> 00:25:49.380

Shenin: Alright, so just to begin we'll be talking today about genetic services, in Appalachian Pennsylvania.

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00:25:50.250 --> 00:26:03.750

Shenin: Neither Julia I have any disclosures or conflicts of interest and as Dr. Kelly also mentioned, I am no longer with UPMC but Julia is and we also had these slides reviewed by other counselors at UPMC.

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00:26:07.050 --> 00:26:07.410

Hillary Rieger: Right.

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00:26:25.980 --> 00:26:30.270

Shenin: You all, right, Julia could you review the slide please.

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00:26:31.440 --> 00:26:49.170

Julia Stone: Yeah, so we wanted to right off the beginning, give a brief overview of some of the primary service delivery models that are utilized for genetic services in the city of Pittsburgh our discussion today is really going to revolve around

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00:26:50.340 --> 00:26:59.040

Julia Stone: how the clinics work and how the process works for genetic counselors at Magee Women's hospital in Pittsburgh.

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Julia Stone: But a lot of these models are also used by the other genetics providers within the city so there's there's three main primary service delivery models that we utilize at this time.

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00:27:09.990 --> 00:27:23.970

Julia Stone: The first one, the classic service delivery model or in person visits where patients actually come to the hospital and get to meet one on one with a genetic counselor sometimes those those appointments and involve a position oftentimes they do not.

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00:27:25.800 --> 00:27:38.820

Julia Stone: The second type of service delivery model is a telemedicine model, this was something that we utilized prior to the COVID 19 pandemic and what.

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00:27:39.390 --> 00:27:49.890

Julia Stone: What we had established what was set up was patients could go to UPMC facilities at other hospitals that were not UPMC Magee Women's hospital.

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00:27:50.250 --> 00:28:03.660

Julia Stone: And they would be set up with a video to connect them to a genetic counselor in Pittsburgh and we're going to go through a little bit about some of the sites that we that we work with that do telemedicine.

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00:28:04.380 --> 00:28:20.970

Julia Stone: But the key thing to note with the telemedicine programs are that the clients still have to go to a facility, and they just don't have to make the trip into Pittsburgh. So they might be able to have access to a facility closer to their home.

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00:28:22.350 --> 00:28:35.400

Julia Stone: And then the third type of service delivery model, our video visits and this sounds very similar to telemedicine, they are often used somewhat interchangeably but for our purposes, we do consider them two separate things.

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00:28:35.910 --> 00:28:48.780

Julia Stone: Video visits for something that have become temporarily available to the genetic counseling team due to the COVID 19 pandemic. This allows us to meet with patients directly through

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00:28:49.650 --> 00:29:06.390

Julia Stone: a video app. Basically, they're able to sign on to an app on a phone or a tablet through their MyUPMC, and we are able to sign in and communicate with them via the medical record service. So it's it's confidential; it's HIPAA approved.

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00:29:07.980 --> 00:29:17.100

Julia Stone: And that allows us to meet with with our clients from the comfort of their own home they don't have to go to a separate facility for their genetic counseling services.

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00:29:25.170 --> 00:29:25.800

Shenin: All right.

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00:29:27.510 --> 00:29:32.370

Shenin: The next thing that we wanted to review is where are genetic counseling services available.

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00:29:33.150 --> 00:29:39.540

Shenin: So, given that Julia will be kind of talking about prenatal and I'll be talking about cancer, we thought it would be useful to show that

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00:29:40.110 --> 00:29:44.100

Shenin: there's some overlap between the places where both of these things are available.

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00:29:44.790 --> 00:29:50.280

Shenin: The primary place where both services are available in person is at UPMC Magee Women's hospital.

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00:29:50.610 --> 00:29:58.500

Shenin: And we also have some shared telemedicine sites and again telemedicine denoting that it's a facility where a patient goes and meets with a nurse in person.

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00:29:59.370 --> 00:30:06.240

Shenin: Cancer Genetics has some additional telemedicine sites, and we also have two other in person locations.

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00:30:06.750 --> 00:30:20.280

Shenin: So Hillman Cancer Center specifically in Shadyside is a place where genetic counseling services are also available and once per month, a counselor staffs a clinic at UPMC Passavant and Cranberry which is northwest of the city.

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Julia Stone: And then for for the prenatal genetics team.

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Julia Stone: Most most of those appointments right now are seeing either in person or via video visit. Actually there are some telemedicine

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00:30:38.100 --> 00:30:49.140

Julia Stone: sites in contracts that we do still have established, however, that those services largely stopped after the onset of the pandemic and being able to do video visits.

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00:30:49.710 --> 00:31:01.890

Julia Stone: Because understandably clients prefer to if they have the option, potentially meet with with their counselor from home. Of note, these video visits, they were slated to go

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00:31:02.910 --> 00:31:12.660

Julia Stone: To go away, they are part of I believe in the emergency Covid provision here in the state, so they it was something that was supposed to go away in September.

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00:31:12.930 --> 00:31:30.330

Julia Stone: That has been extended, so we are still able to provide these video visits services, at least through March 30th of 2022, and we're still waiting to see whether or not that will be something that we can continue beyond that time.

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00:31:35.130 --> 00:31:49.650

Julia Stone: So we also wanted to take a moment to highlight some of the other genetic services that are available in the city of Pittsburgh. We're not going to go through each one of these in detail. Neither Shenin nor I have been intimately involved with either of these clinics.

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00:31:51.030 --> 00:31:58.350

Julia Stone: But we did want to we did want to let everybody know, although we're going to be primarily focusing on the cancer and prenatal service delivery

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00:31:59.040 --> 00:32:06.120

Julia Stone: models and services here in the city, there's a whole host of other genetic services. The two big ones that I want to highlight

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00:32:06.390 --> 00:32:22.950

Julia Stone: That I think are really unique, we have an ophthalmology genetics clinics and group of genetic counselors that meets with both children and adults for evaluation and in discussion about inherited eye diseases, that's that's not a common

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00:32:24.000 --> 00:32:34.500

Julia Stone: clinic. A couple years ago, I heard, I think there were only 10s of counselors maybe 40 that were practicing ophthalmology genetic services in the country I'm sure that's gone up since then.

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00:32:36.030 --> 00:32:53.100

Julia Stone: But something unique here. And then we also have a physician who's doing, a physician and a team of genetic counselors that are incorporating genetic services into a primary care clinic so they call it a primary care physician medicine clinic and really interested in seeing where

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00:32:54.180 --> 00:32:59.100

Julia Stone: where that kind of continues to go and what comes out of it, because I think that's a really interesting

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00:32:59.700 --> 00:33:14.340

Julia Stone: practice and how to incorporate genetic services into a day to day primary care facility. The one thing that you may notice is not on this list that was included in my introduction, is an adult genetics clinic.

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00:33:14.640 --> 00:33:16.860

Julia Stone: That, unfortunately, is a clinic that

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00:33:16.860 --> 00:33:28.140

Julia Stone: does no longer exist or at least for the time being, we do not have a clinic in the city of Pittsburgh that can accommodate adult patients for general genetic services.

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00:33:28.710 --> 00:33:43.680

Julia Stone: Outside of the specialty services listed on the slide and cancer genetics and prenatal, of course. That is a significant limitation of genetics in the city at this point, and frankly with genetic clinics all over the country and throughout.

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00:33:44.370 --> 00:33:55.980

Julia Stone: Sure mm hmm um it's something that that we're we're working to hopefully get back at at some point, but for right now, we do not have that service here in the city.

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00:33:59.580 --> 00:34:02.430

Shenin: And we also just thought that it would be helpful to show a map

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00:34:02.940 --> 00:34:12.480

Shenin: that kind of connects to the Venn diagrams that we showed earlier, so the services provided by UPMC are unsurprisingly concentrated around Western Pennsylvania.

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00:34:12.870 --> 00:34:19.800

Shenin: Although we do get quite a lot of coverage of like all the Western Pennsylvania from north to south with our different satellite clinics.

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00:34:20.610 --> 00:34:33.660

Shenin: The stars just indicate that there are places where both prenatal and cancer services are available, mostly telemedicine, and then there are a couple of areas where cancer genetics telemedicine services are available as well.

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00:34:34.620 --> 00:34:40.860

Shenin: One thing that is noteworthy is that while we certainly see a lot of people from like Altoona, Johnstown and over.



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00:34:41.310 --> 00:34:48.660

Shenin: And we are also the closest cancer genetics service and potentially the closest prenatal service definitely cancer.

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00:34:48.930 --> 00:34:55.950

Shenin: For people in Eastern Ohio northern West Virginia and sometimes even upstate New York I routinely saw patients that were sort of.

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00:34:56.310 --> 00:35:01.320

Shenin: Within this halo around the border of Pennsylvania, and if you're not close to something like

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00:35:02.010 --> 00:35:15.690

Shenin: Cleveland or New York City or something like that we did get patients that would drive quite a distance to sometimes even be at one of our satellite clinics Level one at Pittsburgh. So the catchment area that the client services quite a bit larger than the Pittsburgh metro area alone.

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00:35:19.320 --> 00:35:31.620

Julia Stone: Some of the reasons why somebody may be referred for a prenatal or preconception genetics consult, and I make a point to emphasize, we in the prenatal clinic

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00:35:32.190 --> 00:35:43.230

Julia Stone: will see patients both who are pregnant and patients and couples who are considering a pregnancy, but aren't pregnant at that time so both during a pregnancy and before.

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00:35:44.040 --> 00:35:51.120

Julia Stone: We'll see anybody, essentially, who has a higher chance to have a pregnancy with genetic or inherited disorder.

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00:35:51.480 --> 00:36:00.270

Julia Stone: Or anybody who wants to learn more about what their chances might be and what testing options might be available. So some common indications include:

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00:36:01.170 --> 00:36:07.770

Julia Stone: Parental ages parents get older there might be an increased risk to have a child, with certain genetic conditions.

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00:36:08.400 --> 00:36:19.470

Julia Stone: Any personal or family history of the genetic disorder or things in the personal or family history that somebody might be curious as to the chances for them to have a child, with something similar. So, for example,

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00:36:19.740 --> 00:36:36.180

Julia Stone: birth differences, intellectual disability, autism developmental delays etc. Anybody who's a carrier of a genetic condition, whether that was identified through routine carrier screening during pregnancy or if it's something that they know about

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00:36:37.200 --> 00:36:40.110

Julia Stone: from prior to a pregnancy or from a prior pregnancy.

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00:36:41.040 --> 00:36:52.290

Julia Stone: Anybody with a high risk aneuploidy screen result so somebody who's pregnant who's had some sort of blood work completed that's indicated an increased chance for their child to have a chromosome difference.

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00:36:52.710 --> 00:36:58.710

Julia Stone: They'll come and meet with us and we'll talk about what those chances might be in some potential options for next steps.

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00:37:00.060 --> 00:37:10.740

Julia Stone: As well as ultrasound differences, we know many things on ultrasound are sporadic or multifactorial so related to a combination of both genes and nongenetic factors.

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00:37:11.370 --> 00:37:22.830

Julia Stone: But occasionally genetic differences can be related to an underlying oh sorry, ultrasound differences can be related to an underlying genetic predisposition or disorder.

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00:37:23.370 --> 00:37:34.440

Julia Stone: Um one of the things I wanted to highlight here was actually our fetal diagnosis and treatment centers. So this is a group that helps manage pregnancies.

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00:37:34.980 --> 00:37:46.530

Julia Stone: Typically, with complex or significant ultrasound structural ultrasound differences that require extra monitoring during the pregnancy. So things such as heart defects

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00:37:48.540 --> 00:37:56.760

Julia Stone: congenital diaphragmatic hernia, ventricular megaly, etc. that really require a

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00:37:57.870 --> 00:38:09.810

Julia Stone: team effort per management. If a genetic counselor meets with a client and the indication is because of a structural ultrasound difference, we'll make sure that those patients are looped in.

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00:38:10.110 --> 00:38:19.020

Julia Stone: To the fetal diagnosis and treatment centers for their pregnancy management, the routine pregnancy management still goes through their obstetrics provider.

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00:38:19.500 --> 00:38:29.010

Julia Stone: But the imaging and coordination of those imaging consults, neonatology consults to help come up with a birth plan

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00:38:29.550 --> 00:38:40.590

Julia Stone: with the patient and the family. We'll make sure to get patients have been through there and then on the flip side anybody who's referred to the fetal diagnosis and treatment centers.

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00:38:40.980 --> 00:38:52.080

Julia Stone: So if they had an ultrasound difference identified at their you know their home ultrasound department and were referred to the Center for further evaluation and continuation of care.

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00:38:52.470 --> 00:39:03.240

Julia Stone: The first stop is to meet with a genetic counselor so we'll were involved with that clinic in two different ways, but very intimately so and actually one of the coordinators for that clinic is a genetic counselor herself.

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00:39:04.380 --> 00:39:11.340

Julia Stone: And then, a couple of other indications anybody with a history of infertility or recurrent pregnancy loss, something that can be related to the

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00:39:12.180 --> 00:39:20.850

Julia Stone: chromosome or other genetic reason and anybody who wants a more in-depth discussion about testing and screening options that are available before and during a pregnancy.

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00:39:24.570 --> 00:39:29.190

Shenin: And then to go to my area of specialty with cancer genetics so

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00:39:30.090 --> 00:39:37.560

Shenin: one thing to explain structurally about the way that the UPMC cancer genetics clinics are set up is that there is one clinic that primarily sees

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00:39:37.830 --> 00:39:54.300

Shenin: gastrointestinal cancer so colon cancers, pancreatic cancers, etc. And then the other clinic is primarily breast and ovarian cancer, but really serves as everything, other than GI it's just sort of that breast and ovarian are some of the most common indications. So with that preface,

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00:39:55.470 --> 00:40:04.110

Shenin: the cancer genetics program sees patients with either a personal or family history of cancer in some sort of way that is concerning for hereditary predisposition.

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00:40:04.740 --> 00:40:13.590

Shenin: So that can include things like early onset breast cancer defined as any breast cancer diagnosed under 45, colon cancer typically diagnosed under 50,

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00:40:14.340 --> 00:40:27.750

Shenin: renal cancer often anything diagnosed 46 or under, endometrial cancer under 50, melanoma is something that has a strong environmental component, but if you have an early diagnosis or multiple melanomas, we can also see that.

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00:40:28.590 --> 00:40:40.890

Shenin: I will also say that any there are combinations of those types of cancer that even if it's not necessarily early onset if you've seen multiple individuals with breast, colon, renal cancers things like that

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00:40:41.940 --> 00:40:48.120

Shenin: in a family, or even more than one diagnosis and a person themselves that can also be a reason to come to cancer genetics.

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00:40:49.020 --> 00:40:57.000

Shenin: Ovarian or pancreatic cancer at any age should automatically warrant a referral to genetics, we saw quite a lot of those individuals

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00:40:57.810 --> 00:41:07.680

Shenin: having a prostate cancer that has either metastasized or that is aggressive as denoted by a gleason score on pathology of seven or higher should also be referred.

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00:41:09.060 --> 00:41:17.220

Shenin: There are also certain endocrine tumors or cancers that weren't referral to genetics, and this is not particularly common reason for referral.

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00:41:17.610 --> 00:41:28.230

Shenin: But we would see people that had things like paragangliomas or pheochromocytoma has early onset primary care hyperparathyroidism is also a fairly common indication.

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00:41:30.960 --> 00:41:36.840

Shenin: As something that I alluded to earlier is if an individual themselves has multiple diagnoses of cancer,

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00:41:37.380 --> 00:41:44.820

Shenin: or multiple cancers in the same side of the family, there are certain combinations of cancer diagnoses at certain ages that can warrant a referral as well.

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00:41:45.300 --> 00:41:52.290

Shenin: And we would often see individuals who were coming in, because a relative of theirs had had genetic testing previously

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00:41:52.560 --> 00:42:01.650

Shenin: and had a mutation or pathogenic variant identified and that individual was coming in, for consideration of single site testing or testing for the known mutation in the family.

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00:42:02.490 --> 00:42:11.430

Shenin: We would also, if we found individuals who had a mutation on a panel test, would try to facilitate single site testing for their relatives.

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00:42:13.590 --> 00:42:27.960

Shenin: We get a lot of referrals from a number of different physicians so the waitlist for cancer genetics was often like four to six months out so awareness of the availability of cancer genetics was not really like a problem.

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00:42:29.520 --> 00:42:39.960

Shenin: So a lot of the referrals that we get are from gynecologists. from breast surgeons. that's probably one of the main sources for the kind of regular cancer genetics clinic.

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00:42:41.010 --> 00:42:43.950

Shenin: There is a specialty clinic called the

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00:42:44.970 --> 00:42:58.170

Shenin: BCSCC breast cancer. I'm going to forget what the S about. Essentially, it is a clinic for any woman diagnosed with breast cancer under 50, even though I can't recall the accurate an acronym perfectly at this time.

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00:42:58.590 --> 00:43:10.590

Shenin: And the there is a counselor who's on call every week seeing patients on an urgent basis, and many of the new breast cancer diagnoses are referred by breast surgeons.

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00:43:11.280 --> 00:43:21.000

Shenin: We get some referrals from primary care physicians there were a number of people that were savvy enough to you know ask family history questions and recognize that certain patterns of things should warrant a referral.

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00:43:22.380 --> 00:43:26.940

Shenin: There are also some dermatologists, urologists and gastroenterologists that either

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00:43:28.080 --> 00:43:34.560

Shenin: were knowledgeable and would refer to us, and oftentimes these people were we had kind of had a symbiotic relationship with them.

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00:43:34.860 --> 00:43:43.980

Shenin: Where there were certain providers that we would refer people to for screening if they were found to have a condition or if they were still considered to be at an increased risk for cancer.

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00:43:45.180 --> 00:43:54.510

Shenin: And then we would sort of get referrals from them because of their increased awareness of what to do with these patients that did have some sort of need, based on a hereditary cancer predisposition.

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00:43:58.230 --> 00:44:05.190

Shenin: Oh, this is quite small and unlabeled I am not sure what happened to this slide my apologies.

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00:44:06.360 --> 00:44:08.640

Shenin: There was a better version that had some labels on it.

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00:44:09.240 --> 00:44:18.480

Shenin: Essentially, I was able to get some numbers from the cancer genetics clinic that were current as of about January or February of this year that's the last time that the numbers were pulled.

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Shenin: The graph on the left side is supposed to indicate the total number of patients that have been seen by the cancer genetics program since 2018.

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00:44:28.620 --> 00:44:40.920

Shenin: So roughly 1500 patients were seen back in 2018 and that had increased to about 1661 patients as of 2021. And one note that

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00:44:41.370 --> 00:44:49.260

Shenin: was supposed to be included on this chart was that that number is probably an underestimate, and the rate of growth probably would have

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00:44:49.560 --> 00:44:58.530

Shenin: been even higher, had it not been for the pandemic and a lot of like cancellations, in the early days before the video visits were available and routinely used.

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00:44:59.610 --> 00:45:08.490

Shenin: The smaller chart off to the right is specific to the urgent patients that are seen so once per week, there is a genetic counselor who is on call.

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00:45:08.910 --> 00:45:18.450

Shenin: And their patient volume can be quite high; so most counselors see full time counselors and the cancer genetics program see about 10 patients per week.

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00:45:19.080 --> 00:45:27.090

Shenin: You can have up to about 20 patients lots on an on call week it usually doesn't go quite that high, but I routinely saw like 12-15 patients.

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00:45:27.840 --> 00:45:40.590

Shenin: A lot of brand new breast cancer diagnoses for people that need genetic testing in order to inform their surgical decision making, but we would also see other people like women with ovarian cancer, who were considering initiation of apart inhibitor.

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00:45:41.670 --> 00:45:48.360

Shenin: So this is another thing, where I think the trend would have gone up even higher over time it started out in 2018

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00:45:49.410 --> 00:46:05.790

Shenin: with 423 patients and then I think the actual trend would probably continue to peak beyond that 530. One problem here is that when patients have video visits there's no way to mark them as being urgent versus non urgent so there's almost certainly an additional

210

00:46:06.270 --> 00:46:18.510

Shenin: block that should be added to that last column of video visit patients that were urgent, whereas this one only captured in person urgent. So that alone makes up a pretty substantial portion of the patients that are seen just to give you an idea.

211

00:46:21.570 --> 00:46:36.870

Julia Stone: I can tag on to that and say we weren't able to get those numbers for the prenatal preconception genetics connect, but I can say that each of the the full time counselors in that clinic see anywhere between 15 and 20 patients, a week, on average, so a little bit more than cancer genetics.

212

00:46:38.610 --> 00:46:41.820

Julia Stone: And the team size in 2018-2019-2020

213

00:46:44.370 --> 00:46:46.440

Julia Stone: was around the same, pretty similar.

214

00:46:47.670 --> 00:46:53.910

Julia Stone: So I expect those numbers to be approximately pretty pretty similar.

215

00:46:55.350 --> 00:47:04.680

Julia Stone: So when a client or a patient is referred to a genetic counselor for a prenatal or preconception indication.

216

00:47:05.940 --> 00:47:11.070

Julia Stone: there's a lot of lot of things that we do with that individual or things that we can do with that individual.

217

00:47:11.610 --> 00:47:26.160

Julia Stone: Primarily, the genetic counselors provide a comprehensive reproductive risk assessment, including a family history assessment so in every single appointment we're taking a detailed family health history for at least immediate family members to.

218

00:47:27.210 --> 00:47:32.040

Julia Stone: To see if there might be anything in the in the family that could impact the current or future pregnancy.

219

00:47:33.630 --> 00:47:47.310

Julia Stone: And then of course we take into account anything else related to that particular pregnancy, so any test results that have already been been obtained or screening results any ultrasound any ultrasounds that have taken place, etc.

220

00:47:48.510 --> 00:48:01.500

Julia Stone: We provide pretest genetic counseling about reproductive genetic testing and screening options, and that includes a comprehensive discussion about the benefits risks and limitations of

221

00:48:01.980 --> 00:48:10.740

Julia Stone: of these options, our goal is to make sure that the person in front of us has a solid understanding of exactly what

222

00:48:11.400 --> 00:48:21.870



Julia Stone: the testing and the screening options can and cannot do, what their purpose is, and what what the benefits and also what some of the risks could be. Right, we can

223

00:48:22.530 --> 00:48:32.730

Julia Stone: potentially find things that could impact other family members or that can increase patient anxiety, and pregnancy is already a really stressful time for a lot of people.

224

00:48:34.020 --> 00:48:39.330

Julia Stone: And so we recognize that these screening options aren't for everybody and our goal is to make sure that

225

00:48:40.920 --> 00:48:51.000

Julia Stone: that the patient in front of us has the information that they need to make the most informed decision about how they would like to utilize that that testing or screening, if at all.

226

00:48:52.260 --> 00:49:01.320

Julia Stone: And many, many of the the people that we meet with after having a discussion decide that no these these testing and screening options really aren't for them at that point in their care.

227

00:49:02.820 --> 00:49:11.430

Julia Stone: If somebody does decide to proceed with a test or a screen we do coordinate that and I've been using testing and screening.

228

00:49:12.450 --> 00:49:19.290

Julia Stone: Pretty vaguely but I did provide a list of some of the types of tests and screens that we do help coordinate so aneuploidy screening,

229

00:49:20.100 --> 00:49:31.650

Julia Stone: routine blood work to help assess if a pregnancy may have a higher chance for a chromosome difference, primarily handful of trisomy's and potentially some

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00:49:33.210 --> 00:49:37.710

Julia Stone: some micro deletion disorders, although that's still very new.

231

00:49:38.760 --> 00:49:45.510

Julia Stone: Routine carrier screening, we talk about routine options versus broader options looking at

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00:49:46.620 --> 00:49:56.220

Julia Stone: at more conditions, parental carrier typing looking at the chromosomes of the parents, as well as prenatal diagnostic testing.

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00:49:56.910 --> 00:50:14.010

Julia Stone: So during a pregnancy patients have opportunities potentially to pursue prenatal diagnostic testing through either chorionic villus sampling between 11 and 13 weeks of pregnancy or amniocentesis anytime at or after 16 weeks.

234

00:50:15.480 --> 00:50:30.780

Julia Stone: And so we help schedule those procedures. We're able to actually put them put them on the books and work with our scheduling team and coordinate all of the the testing that may be involved for those kinds of procedures.

235

00:50:31.950 --> 00:50:39.150

Julia Stone: We also have the capacity to help coordinate umbilical cord blood testing at the time of delivery so sometimes.

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00:50:40.710 --> 00:50:57.600

Julia Stone: Sometimes parents may want additional genetic information, but are understandably uncomfortable with doing a prenatal diagnostic procedure those procedures do come with some risk with every pregnancy, there is some chance of those procedures could

237

00:50:59.550 --> 00:51:06.780

Julia Stone: lead to a complication that could result in a loss of that pregnancy either a miscarriage or preterm labor depending on when it's performed.

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00:51:07.230 --> 00:51:18.870

Julia Stone: And so, some individuals and couples elect to defer testing until after delivery and if that testing is going to have impact on their baby's

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00:51:19.980 --> 00:51:29.520

Julia Stone: neonatal care, then we can help coordinate and we work really closely with our neonatologist to help coordinate genetic testing on the umbilical cord blood.

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00:51:30.270 --> 00:51:37.710

Julia Stone: A lot of times that looks like routine carrier type analysis but that can also include molecular diagnostic procedures.

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00:51:38.640 --> 00:51:46.860

Julia Stone: And after all the testing is complete them, we also do the posttest counseling so we receive those results we interpret those results.

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00:51:47.640 --> 00:51:53.880

Julia Stone: Along with the the physician and the physician group that the genetic counselors work with.

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00:51:54.570 --> 00:52:06.330

Julia Stone: We'll interpret those results and then share those results with the the patient, oftentimes we've set up some sort of plan for how those results are going to be delivered, most of our results we deliver by phone.

244

00:52:07.770 --> 00:52:16.590

Julia Stone: And patients are generally comfortable with that that we do give the option if they prefer to come into to the hospital or to set up a video visit for a results disclosure.

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00:52:18.600 --> 00:52:26.130

Julia Stone: We can make referrals to appropriate providers so some of the common referrals that we're making our referrals to maternal fetal medicine.

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00:52:27.510 --> 00:52:36.990

Julia Stone: As well as to the fetal diagnosis and treatment centers in neonatology things like that, we often sometimes make referrals if somebody has a

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00:52:38.070 --> 00:52:53.730

Julia Stone: child maybe, who has a previous child who has a history of something that could require a genetic evaluation will make referrals to our children's hospital for that child because that could potentially have impacts for the pregnancy.

248

00:52:55.320 --> 00:53:01.560

Julia Stone: One of the the big things with FDTC that I realized I glossed over earlier is we do also have

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00:53:02.880 --> 00:53:09.870

Julia Stone: an in utero fetal repair team, and so we have performed

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00:53:10.950 --> 00:53:23.340

Julia Stone: recently a few I say recently over the over the course of the past three to five years, we've had some successful in utero spina bifida repairs, that you can read about online.

251

00:53:23.790 --> 00:53:32.370

Julia Stone: And all for those types of surgeries those patients need to have that one of the requirements is that they do have a prenatal diagnostic procedure.

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00:53:32.730 --> 00:53:40.200

Julia Stone: And that there have been a normal carrier type and microarray analysis, and so the genetic counselors are actually involved in

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00:53:40.590 --> 00:53:48.930

Julia Stone: coordinating some of those early steps to to qualify somebody broke procedure like that and we're making sure that if if we're meeting with somebody.

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00:53:49.200 --> 00:54:05.220

Julia Stone: You know who has a baby with a spinal bifida, for example, that we're we're referring them to the physician and the team to talk about in utero repair options and then through all of this, I mean I've talked a bit about how this can lead to patient anxiety and stress.

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00:54:06.510 --> 00:54:14.310

Julia Stone: And we we provide a lot of psychosocial support for our clients throughout the process, from start to finish.

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00:54:14.790 --> 00:54:26.040

Julia Stone: We try to spend a lot of time working with them to make sure that they're getting the right test at the right time, they're understanding their results, and that they feel supported as as they are going through this process.

257

00:54:27.630 --> 00:54:43.860

Julia Stone: And for some of our clients they do utilize the results of genetic testing to make decisions about whether or not to continue a pregnancy. That is a discussion that we have with with our clients as much or as little as they would like.

258

00:54:45.270 --> 00:54:57.060

Julia Stone: And if they are considering going down the path for a potential abortion procedure, then that's something that we do talk about and we make sure that they have the phone number for a family planning team.

259

00:54:58.740 --> 00:55:10.950

Julia Stone: But we recognize that that's a sensitive discussion for a lot of couples and it's definitely not something that all couples elect to do, but it's it's something that we can help support patients and if that's the path that they choose to take.

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00:55:15.000 --> 00:55:18.090

Shenin: And switching over to cancer genetics again so.

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00:55:18.840 --> 00:55:31.110

Shenin: Really between the two different clinics that I mentioned earlier we're able to offer services for genetic counseling and germline genetic testing for a broad spectrum of cancer predisposition syndromes, this is just a brief note.

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00:55:31.830 --> 00:55:34.860

Shenin: Again, mentioning the types of clinics that are available.

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00:55:35.760 --> 00:55:48.000

Shenin: The first step for patients is pretest genetic counseling and psychosocial support, so what sessions typically look like, are you know going through the personal and family history, highlighting what conditions, if any, are the most

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00:55:48.360 --> 00:55:55.950

Shenin: likely to be a potential explanation for the family history of cancer and also acknowledging that it's possible that there might not be a genetic explanation.

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00:55:56.610 --> 00:56:04.260

Shenin: We talked through the different possibilities of genetic testing outcomes and coordinate the test for in person visits that's almost always a blood draw.

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00:56:05.250 --> 00:56:14.520

Shenin: For the sort of traditional telemedicine visits it's also typically a blood draw. Part of the benefit of having a nurse involved at the facility and the other end

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00:56:15.180 --> 00:56:20.250

Shenin: is that we have a person there to help sign the consent form and to take the patient for the blood at that visit.

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00:56:20.910 --> 00:56:30.150

Shenin: Video visits are as I'm sure we're not the only people who have experienced this, it's a little more challenging to either get the patient to go to a blood draw or to

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00:56:30.780 --> 00:56:40.710

Shenin: get a saliva kit and send it back. A lot of people adapted to that with the pandemic, but there is a little bit of an extra step involved there in terms of getting the sample.

270

00:56:41.430 --> 00:56:52.950

Shenin: And one thing that we often do either at the time of the visit or very shortly after the patient has decided to proceed with testing, is to provide an estimate of cost, so I think a lot of the genetic counselors on the call will

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00:56:53.760 --> 00:57:08.940

Shenin: be familiar with the patient anxiety associated with the potential cost of cancer genetic testing. There is still this sort of memory that's been either present in patients are passed on through families that testing used to be very expensive so in order to kind of

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00:57:10.140 --> 00:57:15.480

Shenin: provide that information, and to reduce at least one part of the anxiety, we are able to get cost estimates ahead of time.

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00:57:16.860 --> 00:57:18.990

Shenin: We often send the test result out.

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00:57:20.130 --> 00:57:34.410

Shenin: There are different labs that are contracted with various insurances so depending on what type of coverage a patient has that will dictate where their sample goes, although we do have in house testing for the lab that Julia currently works for.

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00:57:35.430 --> 00:57:43.920

Shenin: And then, when we get those results back again, the majority of results are disclosed via phone, and one of the strengths of the clinic is really interpreting.

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00:57:44.220 --> 00:57:51.720

Shenin: The genetic testing results in the context of the family history so most of our test results are negative, just just generally how cancer genetics works.

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00:57:51.960 --> 00:58:00.660

Shenin: But we utilize a number of different risk models, especially for estimation of breast cancer risks and even if a person doesn't have a genetic mutation found.

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00:58:00.990 --> 00:58:11.940

Shenin: If their risk is high enough, we sometimes still refer them to other clinics, so there is the breast and ovarian cancer detection and early detection and prevention clinic.

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00:58:12.630 --> 00:58:20.460

Shenin: Which is run by the same medical director, as the cancer genetics program, and that is a clinic where women go if they're estimated to have

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00:58:20.760 --> 00:58:32.220

Shenin: an increased breast cancer risk, just on the basis of family history alone, but in the absence of a genetic mutation or if a woman has a genetic mutation that puts her in increase breast cancer risk, but is not yet affected.

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00:58:33.150 --> 00:58:37.680

Shenin: So that's one of the bullet points under indicated referrals to appropriate providers.

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00:58:39.840 --> 00:58:48.120

Shenin: If a person has a mutation in a gene that is associated with other cancer risks, I feel like we have a really robust

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00:58:48.420 --> 00:58:55.710

Shenin: network of providers that we can refer people to and that kind of alludes to the symbiotic relationship I mentioned before, that often the people that refer us

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00:58:56.070 --> 00:59:03.990

Shenin: are also people that we know are knowledgeable and are able to provide the types of screening that our patients need like particular types of colonoscopies.

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00:59:04.500 --> 00:59:13.740

Shenin: particular types of EUS, there are certain gynecological oncologists that we refer women to to discuss things like preventative self effectimies or hysterectomies.

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00:59:14.490 --> 00:59:22.260

Shenin: So if a person has a need to have a discussion to reduce their cancer risks, then get a pretty good idea of where to send them.

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00:59:23.160 --> 00:59:31.200

Shenin: A lot of the specialists are concentrated around Pittsburgh, but even further out in areas like Erie and Altoona, we had identified providers that we're good resources for our patients.

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00:59:32.970 --> 00:59:38.850

Shenin: And then one other thing I mentioned before, is that we did we do help to coordinate testing for at risk relatives.

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00:59:39.450 --> 00:59:43.230

Shenin: Julia actually used to staff, a single site clinic that we had once per month.

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00:59:43.470 --> 00:59:50.430

Shenin: So another thing that people may be aware of is that many genetic testing companies, if you have a positive result identified on a panel.

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00:59:50.610 --> 00:59:58.170

Shenin: It opens this window of testing for your patients that can range from 90 days to sometimes up to six months some companies really extended that during the pandemic.

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00:59:59.250 --> 01:00:07.410

Shenin: And in a clinic where we're already scheduling out four to six months, when you suddenly have all these people that need to be seen for a free testing window.

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01:00:07.710 --> 01:00:13.650

Shenin: Especially if it's a mutation other than BRCA one and two, which typically does not have insurance coverage, that puts some strain on your clinic.

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01:00:14.220 --> 01:00:29.310

Shenin: But we were able to adapt into the open the single site clinic that required, you know, a copy of the testing report ahead of time, so that we could help to accommodate those patients who were at you know 50- 25% risk for it recently identified mutation in one of their relatives.

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01:00:30.690 --> 01:00:39.840

Julia Stone: I can add on to that that single site clinic has continued so there are other counselors that are helping to to stop it now, it didn't stop with with my transition.

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01:00:42.810 --> 01:00:50.790

Shenin: And then, this is just an overview of who do we have that's providing services so Julie, if you wanted to take over the prenatal part first.

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01:00:51.210 --> 01:00:55.440

Julia Stone: yeah I don't know that we have to go through this in too much detail, but essentially we have one

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01:00:56.100 --> 01:01:06.480

Julia Stone: physician who oversees all of the genetic counselors and about seven genetic counselors working in in prenatal preconception genetics. Some of these counselors

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01:01:07.110 --> 01:01:14.010

Julia Stone: work part time in the clinic and do part time with with some other clinics or more managerial things and some of the counselors are full time.

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01:01:15.720 --> 01:01:18.510

Shenin: Similarly, in cancer genetics, we have one medical director.

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01:01:19.350 --> 01:01:29.340

Shenin: There are also nine genetic counselors now. There were a couple of growth positions, very recently, to help address the wait times and just the fact that the clinic has expanded to cover so much ground over time.

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01:01:30.240 --> 01:01:39.090



Shenin: I've also indicated that the last two counselors on that list specifically staff the gastrointestinal clinic, which is a separate but related entity to the cancer genetics program.

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01:01:39.600 --> 01:01:47.970

Shenin: And then I highlighted two of the nurses that are immune support at the Altoona telemedicine and Hammock clinic in Erie respectively.

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01:01:48.390 --> 01:02:00.900

Shenin: I also wanted to note at the bottom just for logistics, that we do have administrative support from genetic counseling assistants when I left. We had one that I know of; there were efforts to hire a second. Julia can you comment on how much support we have?

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01:02:01.710 --> 01:02:09.210

Julia Stone: While two full time genetic counseling assistants and one part-time, who is a one of the current genetic counseling students.

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01:02:09.210 --> 01:02:18.540

Shenin: And then we have to schedulers as well, so a lot of the tasks of you know, dealing with insurance, packaging up samples

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01:02:19.020 --> 01:02:28.080

Shenin: fielding patient calls, getting family histories, we get a lot of support from our genetic counseling assistants in that regard so really focusing more on the counseling as a counselor.

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01:02:29.910 --> 01:02:30.450

Shenin: Um yeah

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01:02:32.160 --> 01:02:45.270

Julia Stone: So this is an overview of how billing for genetic counseling services and compensation for services work at Magee Women's Hospital I do want to emphasize that this is very specific to our hospital and our institution.

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01:02:45.780 --> 01:02:51.870

Julia Stone: It does not necessarily apply to other institutions in Pittsburgh or other clinics in Pennsylvania.

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01:02:52.620 --> 01:02:58.830

Julia Stone: But here at Magee, genetic counselors are not able to bill independently for our services; we are not credentialed.

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01:02:59.460 --> 01:03:09.810

Julia Stone: With insurance companies, so we cannot bill independently, so all of our consults actually have an authorizing physician who reviews our notes and our orders and signs off on everything.

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01:03:11.010 --> 01:03:15.000

Julia Stone: There is a CPT code that's available for

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01:03:16.200 --> 01:03:27.780

Julia Stone: billing for genetic counseling services 96040 that code actually can only be billed from my understanding, if a genetic counselors billing under their own name.

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01:03:28.170 --> 01:03:38.010

Julia Stone: Which we cannot do here at Magee because we're not credentialed, so what happens is in the system we do tracker charges that 96040 code is a

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01:03:38.460 --> 01:03:57.870

Julia Stone: a time related code so it's per 30 minutes of service anything under under 45 minutes is considered 30 anything over 45 minutes is considered 60 and that would continue to if you're going over a 60 minute time, although that's pretty uncommon most.

317

01:03:58.590 --> 01:04:16.290

Julia Stone: The cancer cancer appointments are typically about 60 minutes and the prenatal appointments are typically anywhere between 30 to 60 minutes, depending on the indication. So what what we do is in our medical record systems, we use EPIC, the genetic counselor does indicate a charge.

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01:04:17.580 --> 01:04:33.030

Julia Stone: It's tracked under 96040 for every 30 minutes of time, but that charge on the back end is actually converted into a facility fee, so we are billing a facility we're not billing for our services under a genetic counselor name.

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01:04:34.320 --> 01:04:53.670

Julia Stone: With the COVID-19 emergency declaration that is allowing us to perform these video visits, it is also allowing us to bill for the video visits in the same way that we billed for an in person consultation. So it's treating those services as if the patient was coming to the hospital.

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01:04:55.740 --> 01:05:04.470

Shenin: I will say that I have seen this model used in other places we can't like specify, but we thought it would be useful to say like this is something that's done at Magee.

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01:05:04.950 --> 01:05:13.860

Shenin: It's a model for how genetic counseling can be provided and other places, and this varies from state to state based on licensure laws so just wanted to add that real quick.

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01:05:14.580 --> 01:05:30.630

Julia Stone: For any genetic counselors who are on the call today who may not know the National Society for Genetic Counseling has an excellent excellent resources on credentialing and billing and coding for genetics and genetic services on their website.

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01:05:31.890 --> 01:05:35.940

Julia Stone: I actually use that as a bit of a resource when putting together these slides as well.

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01:05:37.710 --> 01:05:45.840

Shenin: For those traditional telemedicine sites that we mentioned earlier, there are contracts in place for specific sites that are listed here.

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01:05:46.500 --> 01:05:50.220

Shenin: So the billing works similarly, there is a facility fee.

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01:05:50.790 --> 01:05:59.040

Shenin: The institution bills for our services, and then a fee is received on that end and so it's a similar but somewhat different service just because of the telemedicine aspect of that.

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01:05:59.700 --> 01:06:13.770

Shenin: For all other telemedicine sites, our medical director who is able to bill under her own name, unlike a genetic counselor bills for services so just referencing between this slide in the map earlier, you can kind of get a sense of how billing works at different places.

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01:06:14.730 --> 01:06:17.550

Julia Stone: And, and for the contract these sites actually it is.

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01:06:19.230 --> 01:06:32.490

Julia Stone: It is a contract I don't think it's dependent on time we don't actually input, a time we don't input separate 30 minute charges for for those consults so it truly is a contract between the two institutions for those services.

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01:06:35.880 --> 01:06:46.050

Julia Stone: Yup. So quickly we can highlight some of our Community outreach activities, I want to make sure that there's time for for questions this is definitely an area of improvement I would say, for

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01:06:46.530 --> 01:06:55.800

Julia Stone: both departments, the the prenatal genetics team, they do educational visits with local providers offices every year.

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01:06:56.190 --> 01:07:07.260

Julia Stone: Primarily obstetrics providers offices, as well as our reproductive endocrinology team, we work very closely with them, they would be the one seeing patients who might be going through

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01:07:08.130 --> 01:07:18.240

Julia Stone: In vitro fertilization or assisted or utilizing assisted reproductive technologies so a lot of it is geared towards education for local providers, we do also I mean we field.

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01:07:18.870 --> 01:07:34.350

Julia Stone: students from the local genetic counseling program; we field and work with nurse practitioners, medical students, anybody who might be spending a day or so observing with our genetic counseling team.

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01:07:36.480 --> 01:07:42.750

Julia Stone: But otherwise there isn't as much by way of community outreach. I think that's definitely an area for

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01:07:42.930 --> 01:07:44.340

Shenin: for improvement for that team.

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01:07:44.760 --> 01:07:45.900

Julia Stone: And every opportunity.

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01:07:46.650 --> 01:07:55.470

Shenin: Similarly, in cancer genetics, there are through the different counselors that staff, the clinic efforts to reach out to the Community several times per year.

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01:07:56.430 --> 01:08:05.730

Shenin: Some of the different organizations include FORCE, so BRCA carriers, the National Ovarian Cancer Coalition, a survivorship workshop hosted by Magee Women's Hospital,

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01:08:06.330 --> 01:08:22.950

Shenin: And a virtual education series for the Women's Cancer Center. I have a personal interest in presentation as an education, so I gave quite a few talks during my time at UPMC that you can see, but I will concur with Julia that most of the average that we did was to medical providers.

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01:08:24.120 --> 01:08:37.620

Shenin: So I often gave talks to things like nurses, different oncologists during tumor board, and some of the surgical fellows in residence and differently gynecology groups.

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01:08:38.490 --> 01:08:46.890

Shenin: And I think that there is a hope that perhaps educating the providers who make the referrals that there's sort of like a trickle down education.

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01:08:48.300 --> 01:08:53.790

Shenin: But you know there's certainly additional Community outreach that could be done.

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01:08:54.570 --> 01:09:09.540

Shenin: And then to address Dr. Falah's question, yes, nine genetic counselors for cancer, and they're the schedulers and the GCA's share scheduling responsibilities so effectively they're sort of like four and a half people that can help with that.

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01:09:10.860 --> 01:09:16.440

Julia Stone: And the the hereditary GI clinic also has their own scheduling.

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01:09:16.470 --> 01:09:18.240

Shenin: Correct I forgot about that yep.

347

01:09:20.100 --> 01:09:30.180

Shenin: Okay, and we also just wanted to include a little bit of information on different challenges that are particular to our region of Appalachia. Julia do you want to take the first half, and I can take the second.

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01:09:30.840 --> 01:09:38.850

Julia Stone: Sure yeah, so I think the very first thing that comes to mind always is barriers to access right, whether that be having to travel.

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01:09:39.600 --> 01:09:50.250

Julia Stone: From a rural location to see a genetics provider or visit wait time. Shenin alluded to the fact that the cancer team has some pretty long wait times for their services.

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01:09:51.360 --> 01:09:56.010

Julia Stone: This has been improved somewhat through the availability of video visits.

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01:09:57.210 --> 01:10:15.570

Julia Stone: However, there are still some barriers to access even with video consults, right. The client needs to have some sort of phone or computer or a tablet that's functional that is up to date enough, it's a current software to be able to utilize the

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01:10:15.570 --> 01:10:21.300

Julia Stone: application. Has to be a smart device right they also have to have strong wifi.

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01:10:23.880 --> 01:10:42.480

Julia Stone: So that the video and the audio connect and as well as some level of technical literacy, to be able to troubleshoot when when things aren't going right, especially I think we've all encountered clients who maybe they're not hearing the audio because the audio output is set at

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01:10:43.620 --> 01:10:59.640

Julia Stone: at headphones or something like that and there aren't any headphones plugged into the device, and if there's no audio, our system actually doesn't have a chat function, unfortunately, so there's not much that we can do by way of troubleshooting without having to call them.

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01:11:00.990 --> 01:11:09.450

Julia Stone: On their device potentially that they're trying to use for the video consult, so there are still some barriers there in places that can absolutely be improved.

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01:11:10.350 --> 01:11:18.510

Julia Stone: We've been working to establish more telemedicine clinics over time to try to get some clinics closer to where patients live.

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01:11:20.370 --> 01:11:38.730

Julia Stone: Like Shenin said the cancer genetics program has hired some more genetic counselor, so has the prenatal genetic program and with the cancer team, the on call counselor is really helpful in getting patients seen in a timely manner when when those results are urgent for

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01:11:38.820 --> 01:11:47.550

Julia Stone: their treatment, and there's their medical care. For prenatal the way that the clinic is set, they actually don't have very long wait times, which is good.

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01:11:48.060 --> 01:12:00.480

Julia Stone: Pregnancy doesn't stop, everything is urgent and a pregnancy, so if something's truly urgent we're able to get a patient in typically within 24 to 48 hours, otherwise the standard patient usually within a week yeah.

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01:12:01.170 --> 01:12:04.380

Shenin: One other thing I'll say before moving on is that I think with the

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01:12:04.440 --> 01:12:14.820

Shenin: older age of the patient population and cancer genetics, the technical literacy and availability of something that allows you to do a video visit is probably more of a challenge than the typical younger population seen in prenatal.

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01:12:15.690 --> 01:12:30.750

Shenin: With financial barriers so a lot of the people outside of the Pittsburgh metropolitan area or in more rural areas, there are costs associated with travel, and there are a lot of lower income areas in western Pennsylvania, so when you couple low income with travel distance.

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01:12:31.800 --> 01:12:41.430

Shenin: You know, it makes it harder to get to your visit. So we've already addressed some of the efforts through telemedicine and video visits do that one thing that helps more than you think.

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01:12:41.790 --> 01:12:50.370

Shenin: Are parking vouchers at UPMC Magee, I have had patients that are upset that they have to pay \$5 to park if it's an extra cost on top of something that's already pretty high effort for them.

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01:12:51.960 --> 01:12:59.640

Shenin: One thing I mentioned before, too, is that there, there are perceptions that cancer genetic testing still cost \$4,000 if it's not covered by your insurance which

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01:12:59.880 --> 01:13:08.850

Shenin: used to be true decades ago, so we've really tried, through our different efforts in Community and outreach to say it's not that's not quite the deal anymore.

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01:13:09.120 --> 01:13:15.210

Shenin: Please don't let the cost barrier be what prevents you from making an appointment and getting information to help you and your family.

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01:13:15.420 --> 01:13:22.200

Shenin: So we do have the ability to do price estimates. There are patient payment plans and out of pocket options and many labs are pretty generous programs.

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01:13:22.500 --> 01:13:37.500

Shenin: For patient assistance that are income based that like a surprising number of people qualify for it something like if you're within 300% of the poverty line you're testing can be reduced or free, and many labs also have generous options for coverage for Medicare and Medicaid patients.

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01:13:39.810 --> 01:13:43.020

Shenin: So that covers all the ground that we wanted to go over.

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01:13:44.040 --> 01:13:52.410

Shenin: Our current contact information there just wanted to highlight again that, even though this talk focuses on UPMC my contact information is a little bit different now with NYU Langone

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01:13:54.420 --> 01:14:00.210

Shenin: And unless Julia if you if unless you have anything else to say, I think we can open it up for questions.

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01:14:06.090 --> 01:14:12.000

Kimberly Kelly: All right I think you folks have frozen on my screen I'm not sure if you're able to hear me.

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01:14:13.170 --> 01:14:14.520

Shenin: I can hear you yes.

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01:14:16.830 --> 01:14:28.710

Kimberly Kelly: And so, my first question is what are some of the opportunities, you see, for research to improve genetic service delivery in West Virginia and the Appalachian region?

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01:14:31.620 --> 01:14:33.000

Shenin: Julia would you like to go first.

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01:14:33.570 --> 01:14:42.810

Julia Stone: Sure yeah some of the things I can think of off the top of my head definitely a research into awareness of genetic services within the area.

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01:14:44.130 --> 01:14:50.280

Julia Stone: Patients can't get to us if they or their providers don't know that that we better services are out there.

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01:14:51.600 --> 01:15:02.430

Julia Stone: So definitely some awareness, I would say, research into alternative service delivery models is always it's something that's actively ongoing in the field of genetic counseling I think it's really important.

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01:15:02.700 --> 01:15:03.270

Julia Stone: Just to go

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01:15:03.480 --> 01:15:05.070

Julia Stone: additional ways that

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01:15:06.930 --> 01:15:14.880

Julia Stone: additional ways that we can reach patients, whether that be through creating videos or group consults.



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01:15:16.080 --> 01:15:24.180

Julia Stone: Maybe group information sessions and an individual one on one coach console but definitely research in regards to service delivery models could be really helpful.

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01:15:25.740 --> 01:15:37.650

Shenin: I also so there's there's a whole other conference that could be given on the issues surrounding genetic counselors not being Medicare Medicaid recognized providers and how that limits our ability to deliver services.

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01:15:38.130 --> 01:15:40.890

Shenin: I would absolutely love to see someone

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01:15:41.460 --> 01:15:50.790

Shenin: retrospectively analyze data from the pandemic, which created this sort of setting where we were able to offer video visits and what did that do.

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01:15:51.240 --> 01:16:00.960

Shenin: How did patients feel about it? Did were people more able to comply with their visits, because they could have a video visit, even if their kid was sick or even if it was snowing.

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01:16:01.620 --> 01:16:10.080

Shenin: or and I'm not joking, even if the sheep escape from their field in Altoona like these things are like things that are that some of our rural Pennsylvania population deals with.

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01:16:11.400 --> 01:16:23.520

Shenin: I would, I would love to see some of the outcomes of that I would be shocked if it was a net negative rather than a net positive, and I would love to see that used as justification to keep being able to offer these services.

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01:16:24.210 --> 01:16:25.470

Shenin: Because I think that

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01:16:26.430 --> 01:16:31.140

Shenin: You know it's it's surprising, the number of people that just the distance is too far.

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01:16:31.350 --> 01:16:42.750

Shenin: They have to drive to McDonalds to get wifi and you know any any little bit that can help the people that it's easy for them to come see us because they have a car and they live close by, I think, are always going to come see us but

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01:16:43.320 --> 01:16:47.370

Shenin: it's the people that are hardest to reach that need to try and accommodate.

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01:16:50.550 --> 01:16:50.820

Kimberly Kelly: Did.

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01:16:53.550 --> 01:16:57.630

Kimberly Kelly: I believe we have a comment comment or question from Dr. Kahler.

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01:16:58.170 --> 01:17:00.030

Stephen G. Kahler, MD: Kahler, yeah can you hear me all right.

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01:17:01.140 --> 01:17:01.410

Kimberly Kelly: Yes.

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01:17:01.980 --> 01:17:11.580

Stephen G. Kahler, MD: I do pediatric genetics, among other things, but also adults and how do you interact with the pediatric genetics team and their metabolic services and what do you do

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01:17:11.580 --> 01:17:18.210

Stephen G. Kahler, MD: about people with PKU live remotely who are 40 years old, and how does that all interface with the

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01:17:19.350 --> 01:17:21.570

Stephen G. Kahler, MD: pitch for children's I guess genetics team?

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01:17:23.280 --> 01:17:37.590

Julia Stone: So I can feel that one, I know the, so the the children's hospital has a general medical genetics clinic they do also have a metabolic clinic and they will see and follow patients

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01:17:38.070 --> 01:17:43.920

Julia Stone: through adulthood in that clinic. It's one of the few, where they will follow patients into adulthood.

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01:17:45.360 --> 01:17:46.860

Julia Stone: And they do, they do meet with

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01:17:47.880 --> 01:17:50.640

Julia Stone: with those patients and it will annually, excuse me.

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01:17:52.410 --> 01:17:59.040

Julia Stone: The prenatal team and the the pediatrics team are in contact a lot with

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01:18:00.090 --> 01:18:08.490

Julia Stone: with these families, so if we prenatally identify a pregnancy that has an increased risk to have a metabolic conditions such as PKU.

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01:18:08.820 --> 01:18:17.700

Julia Stone: With um, not only are we making sure that the neonatologist are aware, but we're making sure that the the genetics team at children's hospital is aware, because they're going to be pulled into that

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01:18:18.690 --> 01:18:28.620

Julia Stone: that baby's care soon after delivery and vice versa, if they have a child who has been identified, to have a metabolic disorder through

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01:18:28.800 --> 01:18:40.440

Julia Stone: newborn screening or something like that and they're following that that family they'll then refer the family back to prenatal genetics, to talk about risks in future pregnancies and options for future pregnancies.

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01:18:41.490 --> 01:18:45.540

Stephen G. Kahler, MD: Yeah that's totally separate world I guess what you've been talking about here today.

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01:18:46.200 --> 01:18:46.560

Stephen G. Kahler, MD: yeah.

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01:18:46.830 --> 01:18:53.910

Stephen G. Kahler, MD: Cancer and prenatal genetics are usually some from the pediatric genetics

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01:18:54.570 --> 01:19:07.770

Stephen G. Kahler, MD: about the other business like cardiomyopathy is that sort of thing mitochondrial disorders of any age, they typically are going to be seen by an integrated service they're very few places where there's a separate genetic service that is not

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01:19:08.940 --> 01:19:13.890

Stephen G. Kahler, MD: staffed by people with pediatric training or experience so anyhow

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01:19:15.090 --> 01:19:17.070

Stephen G. Kahler, MD: It's good to see this, thank you.

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01:19:17.940 --> 01:19:25.020

Shenin: I've got a couple questions in the chat as well, the first one was commenting on the impact of the local genetic counseling training program on staffing.

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01:19:25.530 --> 01:19:35.250

Shenin: That one's fairly straightforward: most of the people that have been hired in the past years have been new grads from the University of Pittsburgh genetic counseling program.

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01:19:36.240 --> 01:19:51.720

Shenin: Not all, so I myself came from University of Michigan, and I believe there's been at least two or three other new hires in recent years that are from sort of outside, but a lot of people do kind of want to stay in the Pittsburgh area afterwards so it's probably like 50/50 overall.

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01:19:52.860 --> 01:19:55.440

Shenin: And then Julia, if you wanted to address the question from Dr. Falah.

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01:19:56.820 --> 01:19:59.280

Julia Stone: Let me pull up the chat.

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01:20:01.230 --> 01:20:06.270

Shenin: While you're doing that I will just say that, like the the growth positions have been related to need rather than

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01:20:06.390 --> 01:20:18.300

Shenin: like the physicians weren't created for like new Grad students, if there were new grads that were applying to jobs that were created to address an existing need then there were always applicants from the program but it wasn't.

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01:20:19.050 --> 01:20:24.240

Shenin: We don't add positions that often that every new Grad like gets a job.

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01:20:26.760 --> 01:20:36.420

Julia Stone: But the ability to supervise students as they're going through their training program means that we do have to maintain a certain level of staffing

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01:20:36.510 --> 01:20:37.620

Julia Stone: to be able to do that.

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01:20:38.490 --> 01:20:49.440

Julia Stone: So the question was do you think if the genetic counselor can work as an as independent providers and be able to independently bill that could attract a genetic counselor to stay in clinics and decrease their attraction to industry.

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01:20:49.830 --> 01:20:56.430

Julia Stone: I think this is a really, really thoughtful but really complex question there's there's been a lot of

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01:20:56.970 --> 01:21:07.080

Julia Stone: research within the genetic counseling community on reasons why genetic counselors leave the clinic space and go on into other opportunities and one of the big reasons is burnout.

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01:21:08.070 --> 01:21:15.270

Julia Stone: There's genetic counselors do a lot of work, and we care a lot for our patients and tend to go above and beyond.

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01:21:16.710 --> 01:21:20.850

Julia Stone: And there, there are not currently and

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01:21:22.170 --> 01:21:34.080

Julia Stone: probably will never be enough genetic counselors to be able to meet with patients and be utilizing those the in person service delivery models, as we utilize them today.

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01:21:34.920 --> 01:21:40.860

Julia Stone: And so, genetic counselors are stretched oftentimes very thin in the clinic and seeing as many patients as they can.

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01:21:41.640 --> 01:21:49.380

Julia Stone: Some things that aid in genetic counselor or in reducing genetic counselor burnout are having the staffing to help with administrative

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01:21:49.920 --> 01:22:10.350

Julia Stone: work, so genetic counseling assistants or other scheduling assistants, billing specialist operation authorization specialists etc. um I do think billing as an independent provider could be beneficial from a reimbursement perspective for hospitals and genetic teams.

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01:22:12.630 --> 01:22:22.950

Julia Stone: So in that regard that could potentially create funding for these these other services to help with some of the the administrative work.

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01:22:26.220 --> 01:22:28.950

Julia Stone: Yeah I think that answers that question. Shenin do you want to.

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01:22:29.970 --> 01:22:30.690

Shenin: The only other comment I'll make

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01:22:30.750 --> 01:22:36.900

Shenin: that relates to burn out so surprisingly, some people, some people do have emotional burnout you know, they are

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01:22:37.170 --> 01:22:45.810

Shenin: dealing with cancer risk dealing with the risk to have a child, with condition is all something that can take a toll on a counselor but, honestly, one of the most frustrating that's a burnout

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01:22:46.440 --> 01:22:53.580

Shenin: that also relates to things on a global scale is we spend so much time thinking about insurance coverage and price estimates.

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01:22:54.390 --> 01:23:02.550

Shenin: We had a weekly case conference on Mondays, and it was less what is the differential diagnosis for this patient and will this test be covered or not.

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01:23:03.450 --> 01:23:07.680

Shenin: A lot of "genesurance" counseling to use a phrase from a couple of years ago, so.

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01:23:08.520 --> 01:23:16.230

Shenin: National changes in what is covered and what is reimbursed, especially for repeated genetic testing when people have only had limited testing in the past.

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01:23:16.920 --> 01:23:32.310

Shenin: If counselors had to spend less of their time worrying about that, I think that would significantly reduce burnout, but that's another thing that would require national changes in the same way that national changes would be needed to recognition and credentialing so.

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01:23:38.970 --> 01:23:43.650

Kimberly Kelly: The question related to that, and you can decide how personal you want to be.

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01:23:44.820 --> 01:23:45.570

Kimberly Kelly: But so

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01:23:46.590 --> 01:23:50.310

Kimberly Kelly: it seems like using both of you have made some career changes

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01:23:50.730 --> 01:23:51.060

Shenin: In

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01:23:51.090 --> 01:23:52.950

Kimberly Kelly: the past few months and

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01:23:54.000 --> 01:24:17.310

Kimberly Kelly: You know I have been, my family is Appalachian, and you know I've been in West Virginia for 12-13 years now, and you know I don't practice as a genetic counselor and the administrative burden, played a big role in that, for me, but can you, you know, help us

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01:24:17.850 --> 01:24:24.030

Kimberly Kelly: as we try to retain great folks like

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01:24:24.120 --> 01:24:27.900

Kimberly Kelly: like you guys in the counseling profession in our region.

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01:24:29.220 --> 01:24:29.760

Shenin: yeah I

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01:24:29.850 --> 01:24:31.530

Kimberly Kelly: am Finally, talking about why so

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01:24:31.800 --> 01:24:34.440

Shenin: my husband decided that he wanted to move to New York City.

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01:24:34.680 --> 01:24:46.590

Shenin: And that's how I ended up at the Pancreatic Center at NYU. It was nothing to do with the job itself; so I'd hire, this is a joke, but hire people who never want to get married.

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01:24:49.020 --> 01:25:03.300

Shenin: No honestly like it, UPMC, was a great place to work, and it was just logistical things with my personal life that led me elsewhere; so Julia maybe better poised to answer your question about retention, given that you just switch jobs within the same place.

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01:25:04.440 --> 01:25:04.920

Julia Stone: Yeah.

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01:25:06.780 --> 01:25:08.970

Kimberly Kelly: We have trouble retaining faculty members all the time.

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01:25:12.000 --> 01:25:12.390

Kimberly Kelly: No.

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01:25:13.470 --> 01:25:15.090

Kimberly Kelly: It's hard to find

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01:25:18.360 --> 01:25:21.510

Kimberly Kelly: you know dual earning couples to find.

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01:25:22.770 --> 01:25:23.910

Kimberly Kelly: jobs in our region, competitive jobs.

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01:25:27.240 --> 01:25:35.520

Julia Stone: Yeah I can, I can say that the when the position that I have now opened up.

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01:25:36.690 --> 01:25:49.020

Julia Stone: The thing that attracted me to the position was twofold, one was the ability to impact more patients so through my position in the laboratory I'm helping to generate reports, I'm helping

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01:25:49.980 --> 01:26:01.470

Julia Stone: to that I participate in weekly discussions about our whole exome sequencing studies and what variants may or may not end up on a report and is it related to a child's phenotype

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01:26:02.610 --> 01:26:13.260

Julia Stone: and have opportunities to be involved in gene curation and development of new panels and such and in developing a new panel that's something that's going to be offered to

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01:26:14.040 --> 01:26:23.670

Julia Stone: many, many, many patients who I wouldn't have the opportunity to meet personally, but I know that what I'm doing is having a broader impact on the larger patient population.

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01:26:24.030 --> 01:26:35.610

Julia Stone: I do, I help a lot with this with supporting the the cancer genetics team here at Magee and the prenatal genetic team, especially as we offer more more testing options for the prenatal team.

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01:26:37.020 --> 01:26:42.870

Julia Stone: So I still feel like I'm giving back to the patients in that way it's just from a different lens.

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01:26:44.310 --> 01:26:47.850

Julia Stone: And if I can say it was something that that level of

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01:26:48.930 --> 01:26:55.350

Julia Stone: you know procedure and SOP is something that that really fits well with my my brain and my work style.

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01:26:56.970 --> 01:26:57.690

Shenin: And listen

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01:26:58.290 --> 01:26:58.530

Shenin: Go ahead Julia

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01:26:59.130 --> 01:27:07.080

Julia Stone: I was just gonna say there have been other other genetic counselors that have worked in this lab I work with one other genetic counselor currently.

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01:27:07.320 --> 01:27:23.190

Julia Stone: And at the time that I was hired there was not anybody here who had had prenatal experience, so I really wanted to bring that lens into the clinic for thinking for sorry, into the laboratory for thinking about future testing options from from a prenatal perspective.

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01:27:25.050 --> 01:27:28.620

Shenin: One other thought I have just related to retention and keeping people is that

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01:27:28.680 --> 01:27:37.620

Shenin: in about 2015 or 2016 there was a publication, I believe in the Journal of Genetic Counseling about the creation of career ladders in specific

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01:27:38.280 --> 01:27:46.710

Shenin: genetic counseling clinics throughout the country and, at the time it was a fairly uncommon thing, but that publication led to the development of career ladders in multiple places so.

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01:27:48.240 --> 01:27:57.720

Shenin: At all three of the institutions that I've worked at, a career ladder was either in place actively implemented, or was about to be implemented in the near future so.

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01:27:58.320 --> 01:28:10.530

Shenin: Giving people structure, giving people things to work toward, and then the knowledge that there will be some level of financial compensation when they reach those different levels is a good way to retain things rather than

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01:28:10.950 --> 01:28:18.480

Shenin: just sort of like you're hired and who knows what will ever happen beyond beyond this, and I think it also it's beneficial from a salary standpoint.

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01:28:18.810 --> 01:28:32.850

Shenin: But I know the career ladder at UPMC had things like if you published, if you gave a community lecture. So it it helped professionally as well to establish connections with the place where you lived, which I think is also probably important for retention long term.

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01:28:35.100 --> 01:28:52.140

Kimberly Kelly: That's a good point. Yeah and and I don't know how how widely those are implemented, but that is, that is a good idea, and especially you know at our institution, where we don't have as many genetic counselors to consider if you know in building a program having those things in mind.

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01:28:52.770 --> 01:29:04.650

Kimberly Kelly: But I know we're running late and I appreciate you giving us your extra time and for a thoughtful conversation about

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01:29:04.800 --> 01:29:15.120

Kimberly Kelly: genetic services in our region and I don't see any other questions so I'll thank you again for for a wonderful presentation and a good discussion.

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01:29:15.480 --> 01:29:34.080

Kimberly Kelly: And we look forward to following up with you in the future and, and of course our next session will be with NYMAC with Alissa Terry will be speaking to us, who I believe Shenin, you will have probably more contact with going forward.

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01:29:35.730 --> 01:29:49.440

Kimberly Kelly: We look look forward to seeing you all next month and learning more about other ways that we can improve our genetic service delivery, so thank you so much Shenin and Julia for talking to us today.

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01:29:50.010 --> 01:29:50.940

Shenin: Thank you, as well.

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01:29:52.140 --> 01:29:52.800

Kimberly Kelly: Thanks thanks.

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01:29:53.400 --> 01:29:53.910

Julia Stone: Bye Everyone.