

An Overview of the National Cancer Institute's Rural Cancer Control Initiatives – 6/15/2021

Kristine Sande:

All right. Hello, everyone and thanks for joining us today. I'm Kristine Sande and I'm the Program Director of the Rural Health Information Hub. And I'd like to welcome you to today's webinar, which is An Overview of the National Cancer Institute's Rural Cancer Control Initiatives. And it's our pleasure to be sponsoring this webinar with NCI today. I'll quickly run through a few housekeeping items before we begin.

We have provided a PDF copy of the presentation that's available on the RHHub website, and that's accessible through the URL that's on your screen. We'll also put that URL in the chat function. If you have technical issues during the webinar, please visit the Zoom Help Center at support.zoom.us. If you do have questions for our presenters today, please submit those through the Q&A button that's on the bottom of your screen. We hope to have time for your questions at the end of the webinar.

Our first speaker today, Shobha Srinivasan, is a Sociologist and the Senior Advisor for Health Disparities in the Office of the Director at the Division of Cancer Control and Population Sciences at the NCI or National Cancer Institute. She currently coordinates activities across DCCPS, NCI, the National Institutes of Health and other federal and non-governmental agencies to develop programs and initiatives to address health disparities and promote health equity. Through these NCI-funded programs, she promotes the building of partnerships between communities and universities to address various health challenges in underserved and immigrant communities. Her research focuses, for the most part, on social determinants of health, place and inequities, including challenges in the utilization and access to health services.

Next, we'll hear from Zaria Tatalovich. And she's a Geospatial Scientist in the Division of Cancer Control and Population Sciences at the National Cancer Institute. Since joining NCI in August of 2008, she has provided leadership in cancer surveillance and the development of geospatial tools, models, and data for assessment of geographic disparities in cancer risk. She is a scientific lead for State Cancer Profiles and GIS portal for cancer research, which are web-based geospatial resources for cancer control, planning and research. She oversees the development of geospatial mapping tools, including the NCI Cancer Atlas, the NCI Cancer Map Stories, Animated Historical Cancer Atlas and NCI Tobacco Policy Viewer. Her most recent initiative includes custom geographic zone designed for cancer reporting, a team effort to optimize geographic areas for reporting and analysis of cancer statistics across the US.

Robin Vanderpool is Chief of the Health Communication and Informatics Research Branch at the National Cancer Institute. As Branch Chief, Dr. Vanderpool leads the development of Health Communication Research Initiatives in areas such as patient-provider communication, cancer risk communication, social media and new...new media, and connected health. Prior to joining NCI, Dr. Vanderpool was a professor in the College of Public Health at the University of Kentucky, and Associate Director for community outreach and engagement at the UK Markey Cancer Center.

Amy Kennedy is the Health Disparities Research Coordinator in the Office of the Director in the Division of Cancer Control and Population Sciences at the National Cancer Institute. In this role, she coordinates and leads trans-divisional initiatives to promote research priorities with a primary focus on cancer health disparities and equity opportunities. Dr. Kennedy's work focuses on improving the understanding of cancer health disparities, in an effort to achieve health

equity for all, with particular interest in cancer control issues experienced by Native American populations, geographic cancer disparities, genetics as a susceptibility, differences between populations, and disparities in pediatric cancer risk and outcomes. And with that, I'll turn it over to Dr. Srinivasan.

Shobha Srinivasan: Thank you very much for the introduction, and thank you to RHIhub for hosting us today. We all today...you're going to hear today from everyone who works within the Division of Cancer Control and Population Sciences. And I want to really thank the Federal Office of Rural Health Policy for really helping us launch this program on Rural Cancer Control, without whom I don't think we could have come this far in the last four or five years. I would also like to thank my colleagues at the Economic Research Services at USDA for helping us bring together the whole thinking about the health professional shortage areas, the persistent poverty areas, and really do this deep dive into rural America, rather than just doing a comparison across various subgroups. I would also like to thank the fact that the FORHP has been critical in connecting us to other governmental and non-governmental organizations to make this program what it is today and help it grow.

And today what you're going to hear from Zaria Tatalovich, Robin Vanderpool and Amy Kennedy, is what we are trying to do within the program, and we would love to have...to work with all of you within this field to grow this program even further and help improve the health...the health of people in rural America. Thank you. And with that, I will turn it over to Zaria.

Zaria Tatalovich: Okay. Thank you, Shobha, and thank you everyone for the opportunity to present NCI map story about rural-urban disparities in cancer. So, to set the context for this map story, I will first provide a brief overview of NCI geospatial activities and resources, and that understanding health disparities so you can get an idea how map...this map story and other map stories fit within the NCI geospatial infrastructure.

NCI has a relatively long history of collecting, measuring, mapping and analyzing cancer-related information, and these activities support a mission to address and understand health disparities and information to improve health and cancer out...outcomes. We recognize the importance of spatial context across all areas of cancer control continuum. In other words, where you live matters in all of these aspects, starting with a risk, chance of getting cancer, quality of preventive care, accessibility to health care resources, treatment options, and the quality of life after surviving cancer.

So funding research grants is in the core of all activities in our Division of Cancer Control and Population Scientists at the NCI. We have a relatively large portfolio of research grants, including those that apply geospatial science to address the geography of cancer. Other geospatial activities, as you can see in this diagram, are conducted mostly internally, and provide resources for researchers, cancer control planners, advocacy groups, and others interested in learning about the geography of cancer. And I will focus on one of these specific areas namely NCI web-based geospatial infrastructure that provides interactive mapping tools, visualization tools, and wealth of data and research resources. This is the home of map stories that I'm going to talk a little more later.

So NCI mapping resources are valuable, for one for characterizing geographic areas based on cancer burden, and other cancer related information. And this includes cancer incidence, mortality, cancer prevalence, survival, screening, risk factors, socio-demographic measures, environmental exposures and much more. Another important role of mapping is to help identify

underserved areas and help inform where to target interventions to improve health and cancer outcomes. Mapping systems also provide a rich source of data from NCI and from our partners such as CDC, USGS, Environmental Protection Agency, US bureau of census and other useful sources such as yourselves. So, the unifying role of all of geospatial resources is to enhance visualization and communication of cancer-related information, and help generate hypotheses about the observed patterns in geographic disparities.

State Cancer Profiles, that's a screenshot on the left. And then GIS portal for cancer research on the right are the two-principal web-based geospatial resources at the NCI. So, State Cancer Profiles is a result of long-standing collaboration between NCI and CDC. And the primary audience is cancer control planners, but it has also been used by public health officials, by cancer advocacy groups, by researchers and also reporters. So State Cancer Profiles utilizes a combination of charts, graphs, maps, to relay the information or cancer burden in a particular state or county or health service areas as compared to other states or counties in the US, and helps guide and prioritize cancer control activities.

All right, so to continue, we're moving on to GIS border for cancer research, which is a rich resource of geographically-based cancer-related data, as you can see at the bottom of the first screenshot that shows categories of data offered for download and explore...exploration. It also offers a range of tools that can be used for mapping and visualization of these data. We currently feature on the website, NCI Cancer Atlas, Cancer Map Stories, Animated Historical Cancer Atlas, and Tobacco Policy Viewer.

Map stories are narratives that use maps and other visuals to support understanding of geographic disparities in cancer. And each story is a collection of knowledge that it's gathered from recent research and early initiatives. For each map, we first develop a draft narrative, and then work with experts on the topic from our division, and with our partners to make sure that we capture the most important information. And then the information re...relates...reflects our mission. So given the strong focus of our division of rural health, the latest map story covers this particular topic.

So the rural-urban disparities in Cancer Map Story provides an overview of recent contribution to understanding health inequalities between populations residing in rural versus urban counties in the US. The focus is on disadvantages that residents of rural areas face which contribute to elevated cancer rates for certain cancers and also overall higher mortality rates for then urban areas. And I will provide a brief walkthrough, so you can get an idea how that looks like.

So the story begins. These are the screenshots and of...and of inserts of some of the narrative. The story begins with a description of overall cancer burden, and then describes differences in rates for common cancers and leading causes of death among rural in comparison to urban residents. And then the rest of the narrative addresses the contributing factors to cancer disparities, starting with disparities in health care and shortage of healthcare providers. Next is persistent poverty. Very important factor, and our division is investing much effort to address its impact on cancer, of which you will hear a little later. Then patterns of risky behavior, certainly another important contributor to disparities. And last but not least, the topic related to preventive care, screening, and vaccination.

The concluding section of the map story summarizes our divisions initiative to improve the outcomes of cancer in rural area. So this is the point where I will stop, and invite you to, at your spare time, have a look at the map story in a greater detail, and I hope you will appreciate what

we have collectively tried to convey there. So right now I'm going to hand it to Robin, who will talk about the NCI initiatives in telehealth. So enjoy that talk. Thank you very much.

Robin Vanderpool: As Zaria noted, one of our primary goals at the National Cancer Institute is to fund research, and that research is meant to improve health outcomes among many different population groups. And those funding opportunities and initiatives that we have they're made available to the entire extramural community. We certainly know that many of them have relevance and real application in rural communities. And that certainly couldn't be more true with our recent telehealth initiatives that I'd like to share with you this afternoon.

So certainly, we know during the COVID-19 pandemic that there's been a dramatic increase in the use of telehealth to deliver health care services. And even among population groups where we think that maybe in an older group such as Medicare beneficiaries that maybe telehealth usage wouldn't be as high, but certainly thinking about the availability of it post....during the COVID-19 pandemic, you can see that almost two-thirds of Medicare beneficiaries say that their providers are offering telehealth appointments. And if you look at this graph, also from Medicare, you can see where telehealth and in-person didn't quite switch over in the middle of the pandemic, but it came very close. And certainly what we've seen is that the telehealth rates, while they've come back down a little bit, they have not returned to that zero baseline that you might have seen before the pandemic. And so what we're realizing is that telehealth is likely here to stay.

And in this case, even during the pandemic among HRSA funded health centers, you can see that all of the rural residing clinics, maybe the rate and the percentage and the number of visits weren't as high as their urban counterparts. It's still reflected roughly, 15 to 20,000 visits or even 20 to 25% of those visits being offered again as telehealth. And so I think it just goes to show that regardless of geography, telehealth is here, telehealth is here to stay. But again, you know what we might want to start paying attention then to specifically, is what does this look like for our rural communities and how can we improve access to telehealth?

So in about a year ago, it's almost been a full year, in July of 2020, NCI really wanted to start thinking about telehealth and what it means to deliver cancer-related care over telehealth. Because, again, things had scaled up so rapidly during the pandemic, that we were you know wanting to know what are the gaps, and then what are the resources and approaches that will be needed to address those gaps, particularly, again, when we're thinking about telehealth and an evidence base, which was...which is lacking in some instances in cancer-related care. How can we develop that particularly across the cancer care continuum, and what does this look like again in the long-term? And so we were really pleased with our requests for information responses. We received 46 from our variety of stakeholders. And not surprising to this audience, certainly, in doing a content analysis of the responses that we received to the RFI, rural populations had the most mentions, as folks were discussing the scientific gaps and opportunities.

And so throughout the RFI and the responses as we analyze, again, the responses and statements that were made, certainly folks identified the benefit of telehealth care, and that's removing of time and travel burdens in particular. And that may be for medically fragile patients, patients who may have to travel very long distances for specialty care, for example, patients who may, again, and their family members, have time constraints due to work, childcare and eldercare responsibilities. But again, very relevant for our audience today thinking about patients who live in rural and geographically remote areas.

But as many of us are very familiar, when you're thinking about telehealth, it usually requires internet access. Now, yes, it can be done over the telephone, there's even hybrid models, but many of the times to run the platforms, particularly with video, there is the need to have internet access. And we know that certainly internet access and broadband access in particular, may be lower in our rural communities. And that includes having the actual broadband access, having internet at home, and even having a smartphone that is internet-enabled. And you can see some of the statistics here that show, again, across the board, lower rates of this technology access among our rural communities.

And then this is a map that I like to show from the Federal Communications Commission. It's a map of Kentucky, which as...as noted in the introduction, I used to be at the University of Kentucky. And many of the counties that you see highlighted here, they have a lung cancer incidence that's greater than the Kentucky average. You all may know Kentucky has the highest lung cancer rates in the nation. But what's overlaid with these high lung cancer incidence rate is then the percentage of households with broadband access. And so what you're seeing in the counties that are circled in the red and primarily that lighter shade of bright yellow and a lighter shade of yellow, those are counties that again have high lung cancer incidence greater than the Kentucky average. And they have a broadband access along the lines of 0 to 20%.

And so that just goes to show, now does lung cancer... Is it caused by having low internet access? No, probably not. But what we're... what we're trying to think about, though, are what are the services in the healthcare and even social services that a patient might be missing out on if they don't have good quality internet access? And in this case, it could be telehealth, it could be support groups, it could be smoking cessation services, it could be, again, interaction, remote monitoring of their symptoms and side effects with their healthcare provider team. If we think about all the ways even that we're all communicating today over this virtual environment, banking, grocery shopping, education, and work, and employment, and health care, all of it again is being done even more so in a virtual environment and electronic and broadband-based environment. And so we want to think about the disparities that might... that might set up if we don't have equitable access.

And so that was really a prominent theme on our RFI responses. Thinking about having equitable access to telehealth care, and that again, related to lack of internet connection, having the...not having the right compatible device, limited digital literacy, lower socioeconomic status, age and geography. But on the flip of that, we also saw questions about, well, how can partnerships with community organizations be established that can help either minimize travel or again access to these devices in the internet? Thinking about churches, thinking about public libraries, thinking about other community organizations that can be...that we can partner with, again, to make access more available and healthcare more available. And then even thinking about what would it take for us to actually give devices? What is the effectiveness of that, what is the cost of that...of giving the device and the internet access to populations in need?

And then even if you get access to telehealth care, is the delivery then equitable? And thinking about language barriers, communication, lack of cultural competency. What are we missing out when we have these in-person visits, for example, nonverbal cues? Is it comparable to that in-person visit? And what happens when we involve family members or interpreters or other healthcare workers into those patient appointments and thinking about confidentiality and privacy? And again, I mentioned this at the top of the presentation, what about telephone and how can we use that to meet the needs of specific population groups through telehealth?

And so, leading off of this RFI, and again, the impetus behind the pandemic and the impetus to grow the evidence base around telehealth, we now have a couple of initiatives that I hope that

the folks on the call today will take advantage of, along with other research teams, and that is one, centers initiative. So think about centers of excellence around Telehealth Research for Cancer-Related Care. Applications are due in July and the letters of intent are due next week. But these are big centers where we want to see the generation and dissemination of telehealth models of cancer care delivery. And primarily again, that focus on that active patient provider synchronous interaction, and the studies must be done in a real-world clinical practice network. And the centers in their research must focus on access to care and digital divide challenges.

We have some resources where you can review our informational webinar that we've had, and then certainly feel free to reach out to myself or Roxanne Jensen with questions. And then also, we also have a Notice of Special Interest, meaning we welcome investigator-initiated applications for different RO1 and R21 mechanisms that also focus on telehealth and cancer and...and open this up to both synchronous and asynchronous interaction. So thinking about other ways we can integrate clinical data, remote monitoring data, patient portal data, et cetera. And then this also...this mechanism also allows for focus on provider to provider interactions and also those with family members and caregivers. And so we had also an informational webinar with a link here provided, and Kelly Blake and Gurvaneet Randhawa are our contacts for this mechanism. So again, you can see we're trying to grow the portfolio in telehealth and Cancer Care Research.

And then just a couple resources for you all. Our Healthcare Delivery Research Program has recently announced a webinar series. We just missed the one on June 11th from our colleagues at Vanderbilt that focused on rural populations and telehealth and engagement. But we'll have another presentation from colleagues in Philadelphia, and on October. But you can certainly go back and listen to those webinars as well.

And then last but not least, our colleagues over in the Office of Disease Prevention at NIH are going to be hosting a Rural Health Through Telehealth-Guided Provider-to-Provider Communication workshop in October, and you can start registering for that now. But this is part of their pathways to prevention initiative, and it really is going to look at the effectiveness of these telehealth mechanisms, what are the strategies for engagement and sustainability, and again, how can we think about future research in this space? So thank you and I look forward to your questions. I'm going to turn it over to Amy now.

Amy Kennedy:

So, thanks, Robin. So I'm going to finish off the discussion today talking about how the Rural Cancer Control agenda fits into DCCPS's mission for health disparities in health equity.

So here on the slide, I just included a couple of screenshots from our new health disparities and health equity page, our website. And so this was just to point out that throughout the website, you can see that DCCPS supports a vast portfolio of health disparities and Health Equity Research Programs and projects that span the cancer control continuum. And on our funding website, you can find different visualization tools to look at our portfolio. And so here this graph shows our divisions funding history for the last 20 some odd years and specifically for health disparities research. So you can see from this graph that the health disparities portfolio has increased tremendously over the past two decades. And in the most recent complete year's data from Fiscal Year 20, our portfolio consisted of nearly 76%...our portfolio had..grants that had a health disparities component 76% of our total portfolio.

So despite this tremendous increase, we continue to analyze and evaluate what we are funding to find gaps in our research portfolio, and this is when we realized a few years back that there were a few funded projects that focus solely on Rural Cancer Control issues. And so we've really increased our efforts to increase our portfolio.

So I won't read through this list. But as you can see, there's been a bunch of different activities that NCI has led or been involved in, in regards to Rural Cancer Control. And at the beginning in recognition of this need and to inform our efforts at the NCI to better address cancer disparities in rural communities, the division has worked closely with our agency partners, which include the Federal Office of Rural Health Policy at HRSA, CDC, AHRQ, USDA, Census Bureau and FCC, as well as a wide variety of experts and researchers to analyze the current evidence and scale up our research efforts. So we began to host meetings and workshops to discuss the opportunities to increase Rural Cancer Control research, and publish and disseminate our discussions. And from there, multiple funding opportunities have been developed from administrative supplements to RFAs, with recent efforts focusing on expanding research to geographically underserved areas, including persistent poverty areas. So for the remainder of my presentation, I'll be highlighting a few of our recent initiatives.

So this initiative, improving the reach and quality of cancer care in rural populations, was released in 2018 and in 2019. And so the goal of this initiative was to stimulate research to improve the quality of cancer care in rural areas among low-income and our underserved population. So the focus was really on research that could inform evidence-based strategies for delivering cancer care during diagnosis, treatment and survivorship to these rural low-income populations. And from the two rounds...two funding rounds, nine applications were selected for funding and included both observational and interventional studies focused on a wide array of topics including survivorship, financial toxicity, telehealth interventions, and CBPR research.

Another RFA that was released last year, focuses on social and behavioral intervention research to address modifiable risk factors. This funding opportunity sells its applications that develop, adapt and test individual community or multilevel interventions to address modifiable risk factors for cancer in rural populations. So things such as tobacco control, alcohol use, diet, physical activity. It's also anticipated that applicants will address issues such as social determinants of health, cultural factors, and healthcare and technology access barriers that contribute to rural cancer disparities. And this funding announcement is still active with the next receipt date of January 18th of next year, 2022. So we encourage any of you that are interested to apply.

And so shifting gears a bit, as I mentioned recently, we focus on geographically underserved areas, in particular persistent poverty areas. And so these are defined as counties that have poverty rates of 20% or more in the US Census data from 1980, 90, and 2000. So collectively, as you can see in the map, this includes approximately 10% of the US counties with the primary number of counties located in the rural south. And so we're currently working with the USDA to expand this definition to the census tract level to get at a more granular level. And as expected, this newly expanded definition will show that all states and Washington DC will have specific sub regional...subpopulations living in persistent poverty. And we thought that this is an important thing moving forward with our initiatives to really drill down on the granule sublevel categorization...subcounty categorizations, since current county level criteria, we'll leave out a scene from the map huge areas of the country, especially across the west in New England, and potentially making research projects ineligible for funding.

And so a recent NCI publication found that those living in persistent poverty are more likely to die from cancer than people living in other counties. And while the risk...and this risk was over and above the heightened risk seen in areas experiencing current, but not persistent poverty. So we at the NCI have wonder how can we extend our work into these areas, and what are some opportunities that can help develop and implement programs for cancer prevention and care coordination?

The next few slides will delve into these a bit more. But these are the three efforts that we've sort of focused on, persistent poverty and geographically underserved in general. First was last spring with administrative supplements to our own grantees to expand into geographically underserved areas. This past spring an administrative supplement to our P30 cancer centers, to advanced research and persistent poverty counties. And lastly, most recently, released Notice a Special Interest to appeal one grants proposing cancer control research in persistent poverty counties.

And so starting with the research in geographically underserved areas, so the supplement which occurred last May. It focused on applications proposing research in areas with higher persistent poverty, with special emphasis on health professional shortage areas and frontier in remote areas. And the supplements focus on areas including the implementation of novel interventions and social behavioral and health care delivery, and the dissemination and implementation of evidence-based programs and practices. And so six awards were made last spring. The persistent poverty P30 Cancer Center Supplement, the purpose of this seeks applicants focusing on projects that propose to plan, implement, and sustain cancer control programs and underserved persistent poverty areas. So the overall goal is to really build capacity in the local clinics. And the awards for this opportunity are currently pending.

And lastly, the Notice of Special Interest or NOCI, which is expanding cancer control research into persistent poverty areas. This was just recently released and bound in the NIH guide. And this aims to provide resources to support highly collaborative, multidisciplinary program projects that focus on the development and implementation of cancer control research in low-income and or underserved populations living in persistent poverty areas. So, we anticipate program projects to include multilevel interventions that address underlying factors affecting poverty and examine other social determinants of health in one or more areas across the cancer control continuum. And so, this...the first due date since it was just released is in September of this year.

And so switching gears a little bit. Here is a save the date. So, we have begun planning our next Rural Cancer Control meeting, Advancing Rural Cancer Control Prevention... Advancing Rural Cancer Prevention and Control in the Next Decade. So this meeting was originally scheduled to be held at Washington University in St. Louis last year. Of course, during the pandemic, it was postponed, so we decided to delay it to summer of next year in 2022, August 10th through the 12th. So they were able to offer both in-person and virtual participation.

And so a little history behind this meeting, it started a few years back with the Rural Cancer Center supplements group. Those were the awards coordinating an annual meeting for investigators to come together to discuss their research. And since then, this group has grown and the purpose of the meeting has expanded to bring together grantees from various initiatives, partners from other agencies, and the NCI to discuss lessons learned, challenges and opportunities, and planning for the future of Rural Cancer Control research.

And my final slide. So now that I've sort of highlighted a few of the various activities that NCI has done focused on rural research, it's important for you all to know that improving rural health remains a top priority for the division and institute moving forward. And while we have developed specific initiatives and programs solely focusing on Rural Cancer Control, it's important to keep in mind that all of our research agendas encourage work in rural areas. And our efforts ...rural efforts have been successful, in part due, to our investigators work which ensures that their research, one, is culturally adapted, that their work and interventions meet the needs of rural communities. Two, they successfully utilize community-based participatory research approaches to involve community members and partners into all aspects of the

research process. And three, they have ensured that research is sustainable, so that interventions can continue upon the end of the project in an effort to achieve health equity for those living in rural communities.

And on behalf of myself and my other colleagues at NCI, I would like to thank you all for attending today's webinar. And this page lists, which I know the slides are found online lists our contact information along with the link to our website, and we look forward to your questions with the time we have left.

Kristine Sande: So, one question would be, do you have thoughts for rural health care facilities who have an interest in research? Maybe as far as getting connected with researchers, how could they get involved?

Robin Vanderpool: I'm thinking back to my own experiences when working in Kentucky and thinking about our different communities across the United States. You know and one is to certainly explore... Well, there's different models for it, of course. But you know community academic partnerships, where for example, the clinics may have a regional or a land grant institution and academic medical center in their... in their state and could find ways to collaborate through cancer centers, through other health-related research centers, and you know other or cooperative extension. Just thinking outside the box of different networks and collaborations and partnerships that make up our rural health networks.

And even oftentimes, some of the academic medical centers or their cancer centers may have affiliate networks that are more community-based oncology delivery. And I think those are opportunities for local research, whether it be in thinking about clinical trials, or whether it's maybe behavioral research. I just think there's different...It doesn't all have to necessarily come in as an R01 funded grant opportunity, but I think there are different mechanisms and different opportunities to get involved in rural health research through an example of community academic partnerships. But I'd love to hear other ideas from my colleagues.

Shobha Srinivasan: So, one of the things that we do recognize is, rural hospitals and primary care clinics have very little research resource. Firstly, they have very little resources, forget the research resources. So a partnership is what we would really like to encourage and build a network. And we also recognize that for NCI, the signature programs are the cancer centers, but we also recognize that all cancer centers are located in urban areas. So what we have done over the last seven, eight years is encourage cancer centers to reach out into rural areas and also rural areas to reach out to cancer centers to build that kind of partnerships. But that's not the only people who do research. There are other universities, also local universities, that do research in these areas. And coming together and talking about these issues are something and that will really move the agenda forward.

So, there was a question earlier by Warren Dilts about state of Iowa, and actually state of Iowa, course there is a rural center and the cancer center and we've had some projects between the two. But recently, the cancer center got a project with Mary Charlton looking at cancer care delivery in rural Iowa. So that project is just going to stop this year. It was the end of this year, which is the end of our fiscal year, which is September.

Robin Vanderpool: That's right. In Iowa also, the university is one of the hazard prevention research center and a member of the Cancer Prevention and Control Research Network. Again, Mary and Natoshia Askelson and others are involved in that work with the CDC.

- Shobha Srinivasan:** Yeah. And Mary Charlton is actually the PI...the CO-PI which is the surveillance epidemiology and end results, which tracks incidence and mortality and also other factors now. The CO program has expanded and she is the CO-PI for it.
- Kristine Sande:** Great. And I see one other question in the chat. It says what are your recommendations for engaging comprehensive cancer programs and coalitions in this work?
- Robin Vanderpool:** That's a great question, and we highly recommend it. And in fact, its...its the cancer centers this summer, in fact, had an opportunity to apply for supplemental funds to work directly with their comprehensive cancer control coalitions, and those all just were submitted a couple of weeks ago and are under review. But that is certainly a priority for NCI and CDC, our two cancer control programs, to work with one another. And to promote collaborations with state comprehensive cancer control efforts and tribal coalitions and another, again, activity of the cancer prevention and control research network that is funded by CDC is to take under an analysis of state cancer plans to see how many of them are focusing in on and have goals and activities around rural communities in their state. So Shobha may have more to add, but I think that's certainly a great partner for our communities and states.
- Shobha Srinivasan:** So, it's required now that all NCI designated cancer centers have a community outreach and education core. And Robin is very familiar with that. She works very closely with many of them, having been a lead herself of that core. So she knows the duties that they perform. That is a very good conduit for connection for communities in rural America to connect with their local or their larger area CoE Associate Director, and that's something that we can make available to RHHub at some point. We can...we can correlate that. I don't know, Robin, whether there is one available already somewhere on the website. Maybe you can clarify.
- Robin Vanderpool:** There is not my...not to my...not to my knowledge, but we can make connections. Just as Shobha said, we're happy to make connections with folks and individual states and cancer centers. And hopefully some of that will be more publicly available in the near future as we correlate that information. And they're starting to have their own annual meetings, which are again, open to others as well, that we can share with RHHub.
- Kristine Sande:** All right. So the next question is for Dr. Vanderpool. Says, thanks for a great presentation today. Just to clarify, do any of the projects you mentioned focus on building better infrastructure such as better internet in those rural areas? It says, "I feel like that's what we need to do."
- Robin Vanderpool:** That is certainly a great comment and our work and our funding opportunities are really meant for research on telehealth and the delivery of care via telehealth. But we recognize those physical and infrastructure challenges that were noted in the question. And so that's where we really look to. The leadership and opportunities that are coming out of the Federal Communications Commission and other initiatives to improve and make more available and make affordable that internet access. And again, I know that's certainly a concern for all healthcare initiatives and research projects as well. So we're monitoring that with our colleagues at the FCC.
- Oh, sorry. I just had one... That's just really another opportunity that I hope that we can all think outside the box of thinking about how to potentially bring the internet access to patients or bring the patients to the internet access through these other initiatives. For example, I know many of us are familiar with the VA initiative where they deliver mental health care services often over telehealth in a living room type of an environment that is often done, for example, in local public libraries, where there's spaces dedicated for those services. And I think RHHub has

actually had some articles on that in the past. But I think, again, for us in the cancer community, that's challenge a good challenge and opportunity for us to think as creatively as well.

Kristine Sande: Great. Well, I'm not seeing any... Oh, so a late breaking question. Are there any opportunities for recent college graduates to be coming to work for that you all do?

Shobha Srinivasan: Yes. So we have a cancer training research fellowship within the division and we are glad to have you come and work with us over the summer, for three months, for six months, for a year, two years. We have fantastic opportunities for young researchers who want to get involved in this field in various areas. The division is very large. It goes from basic surveillance work that the CO does, that's what Zaria's group does, to intervention behavioral work, that's what Robin's group does. And there's a whole healthcare delivery program, and there's an epidemiology program. And we have a lot of interest, in ah...as Amy mentioned, on geographically underserved, persistent poverty, looking at small populations and seeing how we can deliver proper prevention and cancer control and treatment in the communities that we serve across the US. So I would really encourage students to apply to this program. And I think Zaria just put a connection to that fellowship opportunities. And I would recommend taking a look at it and getting in touch with us. We look forward to the next generation.

Robin Vanderpool: That's right. And there's ah...for example, this summer, there's also the NIH Summer Internship Program that students who may be in school can even apply for. We have a rising junior, who's going to be in our branch, for example, this summer, working with us that came in through that program. There's also the ICURE, which is focused on bringing in students from underrepresented population groups. As Shobha said, there's just lots of different opportunities at different levels of training to come to NIH. And other institutes are also doing work in rural health, so I think there's lots of opportunities.

Kristine Sande: That's great information. And at this point, I'm not seeing any additional questions. So I think we will wrap up for today. I want to thank our speakers from NCI, this was great information. We're so excited to see all of the great work that you all are doing around rural cancer prevention and treatment. It's really exciting for those of us working in rural health to see that. I'd also like to thank everyone who joined us today. And a survey will automatically open at the end of the webinar, and we encourage you to complete that survey to provide us with feedback that we can use in hosting future webinars.

The slides used in today's webinar are currently available at www.ruralhealthinfo.org/webinars. In addition, a recording and transcript of today's webinar will be made available on the RHlhub website, and we'll also send that to you by email in the near future. That allows you to listen again or share the presentation with your colleagues.