



Fletcher Group RCOE October Webinar  
Recovery Ecosystem Index Mapping Tool –  
Megan Hefferman and Michael Meit  
Thursday, October 6, 2022

**Michelle Day:** [00:00:00] Good afternoon everyone, and welcome to The Fletcher Group Rural Center of Excellence's webinar [00:01:00] series. Today's session is scheduled to run from 2:00 PM to 3:00 PM Eastern Standard Time. My name is Michelle Day, and I am your moderator for the session, along with Janice Fulkerson and Erica Walker. A couple of brief housekeeping items and then we'll begin.

You entered today's session on mute and your video was off and will remain so for the entirety of the webinar. Your chat feature is located at the bottom right of your screen. Use the dropdown feature to communicate with either the panelists only or panelists and attendees. Please direct all questions regarding the webinar content to the Q and A section.

Be advised that this meeting is being recorded and will be available to you on our website once it has been transcribed. You can access our website at [www.FletcherGroup.org](http://www.FletcherGroup.org). Also, at the conclusion of today's session, there will be a short survey regarding the webinar content. Your participation in that survey is greatly appreciated and will only take a few [00:02:00] moments to complete.

Our presenters today are Megan Hefferman from the University of Chicago, and Michael Meit with East Tennessee State University. Megan Hefferman is a research scientist in the Public Health Research Department at NORC, at the University of Chicago. She has expertise in the areas of substance use research, rural health, health equity, and public health systems research.

She has contributed to the development of the Opioid Misuse Community Assessment Tool, an interactive mapping tool that displays drug overdose mortality rates with overlays for contextual factors such as socioeconomic and demographic indicators. She has also led the development of the Recovery Ecosystem Index, which measures the substance use recovery ecosystem of each county in the United States.

She holds a Master's in Biostatistics and Epidemiology from Boston University. Michael Meit serves as Director of Research and Programs for the East Tennessee [00:03:00] State University Center for Rural Health Research located in the Appalachian Highlands of Northeast Tennessee. Michael also retains a role as a Senior Fellow in NORC at the University of Chicago's Public Health Research Department.

And serves as Deputy Director for ETSU's HRSA-funded Rural Health Research Center, the ETSU NORC Rural Health Equity Research Center. Michael currently leads studies focused on the evaluation of rural health programs, health equity, opioid misuse, and food insecurity among others. Recently, he led the development of an Appalachian Regional Commission study exploring Diseases of Despair in Appalachia. A companion Appalachian overdose mapping tool and the national expansion of that tool, the Opioid Misuse Community Assessment Tool. Megan, Michael, the floor

is yours.

**Ernie Fletcher:** Yeah. Before we start, this is,

uh, Ernie and I, I, I was going to join just to kind of give a little introduction, Michael and Megan on how we [00:04:00] got to where we are now, and then turn the program over to you, if that's okay.

Um, this started, I guess, Michael, with meeting you all, meeting you in DC probably three and a half years ago, or so.

Uh, we were

really very pleased to have a partnership with NORC and ETSU on this subject because they had so much expertise developing some other indices, uh, that they may talk about. But the Prosperity Index was one that caught our attention and it seemed to have a lot of parallel, um, functionality to what we've done with this recovery ecosystem.

Now I start, the important of the recovery ecosystem I think comes back and it gets very basic. And that's cause I've made this statement and I think it's pretty clear when you look at the increase in overdoses and, uh, that's both from, you know, fentanyl or not, both for multiple things. Fentanyl, the psycho stimulant overdose is up.

We've got an increase in suicide. A lot of that is [00:05:00] related to substance use disorder. And then alcohol use is up substantially. And the deaths from alcohol now are est, or the latest number I saw was over a hundred thousand a year. This increase started even before Covid. So I think Covid was a, an a crisis that really uncovered our lack of resiliency and our lack of ability to face, you know, some isolation and stress.

Uh, historically we've seen increase in substance use, uh, throughout many crises, uh, situations, even going back to the Opium Wars in China. So, uh, there's a long history of that. But what we're doing, I'll have to say, you know, is good, but it's, it's not working. It's either not enough or, or needs a kind of a broader focus,

I think. The recovery ecosystem addresses that. It, it looks at assessing communities on how recovery friendly they are. And [00:06:00] I think it has both the power, uh, and we'll see this as we begin to use this tool, of not only, uh, With the high recovery index of hopefully reduce the initial use of substance, but provide tools for folks to get into recovery

so it can reduce, if you will, the prevalence over a period of time. So with that, I say that uh, Megan has just been fantastic. It kind of leading this effort and putting together administration, Michael. Been great to work with. They both have given this, these presentations around the country now. So I'll turn it over to you all and I just want to say thanks.

We've got a little bit of a, uh, disaster going down here in Florida, so I'm going to drop off and, uh, let you all have it. So thank you all very much for being here today.

**Michael Meit:** Thank you so much, uh, for the introduction and I am happy to jump in. So, uh, I am Michael Meit, and, um, we are going to [00:07:00] kick things off, talking about the Recovery Ecosystem Index, and if you go to the next slide.

What I want to do is just first introduce the concept of recovery ecosystems. So this is the model that was developed by the Appalachian Regional Commission. It's kind of a simple model. ARC focuses on workforce training and, and employment as their main contributors to ensuring that we have a healthy recovery ecosystem.

And you'll see that box at the bottom. The Recovery Support Services, those are all of those support services that need to be in place at the community level that support people's workforce training and employment. But, but really from their model, they focus in on that workforce and employment side. And we, we certainly see that as central and important.

But we also wanted to dig into that yellow box a little bit more. And if you go to the next slide, uh, this is another way to look at the recovery ecosystem. This was [00:08:00] developed by The Fletcher Group, uh, and I really like this a lot because it, it kind of, takes that yellow box and starts to flesh it out a little bit more.

So you see on the left the different sectors, the different individual groups that are involved in building a recovery ecosystem. The criminal justice sector, treatment providers, counselors, community support. Um, the middle is more the types of initiatives that they are building to create those support systems.

Case management. peer support, stable housing, educational support. And then on the right are those broader outcomes. Those, those pieces that we want to make sure are available to people in our communities to, to really help support them in their recovery. Employment, transportation, housing, and social support. So it's really kind of with this broader model in mind that we went down this, this journey to create this ecosystem index. And we're gonna dig into that [00:09:00] next, If you go to the next slide.

So this is really what we were charged with. So, uh, this, the funding for this comes through The Fletcher Group from the Health Resources and Services Administration. And together The Fletcher Group, NORC and ETSU worked together, uh, with a technical expert panel to develop this ecosystem, uh, index. And so the goals were to build this Recovery Ecosystem Index.

And that's really thinking through what are the measures that help us to assess the strength of county level recovery ecosystems or those support systems that are in place. Uh, and ultimately, we want that data to be available to people working at the community level. We want it to inform their programming and technical assistance so that we can help guide efforts to strengthen recovery ecosystems.

And to do that, we built a mapping tool. And the mapping tool's really what, what Megan will be demonstrating for you today. And again, the [00:10:00] idea was use this as a way to engage people at the community level. Policymakers, treatment providers, community organizations, drug professional, drug court professionals, and others,

to really understand how their community is doing in terms of supporting people, uh, in their recovery and areas where they can invest to strengthen those support systems. If you go to the next slide. So I mentioned that this was guided by a group of technical expert panel members. These are those individuals, and I, I'm not going to read all the names for you, but what you'll see here are people, hopefully, many of whom you recognize. Uh, these are people who are really preeminent researchers and leaders in the area of recovery, area of substance use disorder.

Uh, people who have thought through what it takes to build a strong recovery ecosystem, and people who are experts in terms of developing indices. So people who understand measuring. [00:11:00] Go to the next slide. So this is really kind of where the rubber meets the road, cause at the end of the day, this index is comprised of 14 indicators, and we had to figure out how do we get to those 14 indicators.

So this was really a, an iterative process with our technical expert panel. We started with a very comprehensive literature review, and from that we came up with over a hundred candidate measures. Uh, one of the things that was really important in identifying measures was to think about measures that could support development of a national tool.

What that means is that we need data that is organized at the county level, and we need things that can be modified through community effort and activity. So taking that initial list, some of them we were able to winnow out because they didn't really meet those criteria. Um, and from that we came up with 36 measures that we thought were good potential measures. [00:12:00]

And we worked with our technical expert panel to decide which of these were the highest priority. Which of these really helped align with these different conceptual ideas of, of strong recovery ecosystems. And at the end of the day, we came up with 14 measures. Uh, go to the next slide. So these are them.

These are the 14 measures. Uh, we organize them into three domains. So we have measures that look at substance use disorder treatment, and you can see examples, not examples, you can see all of them here. Um, but these are things like, the average distance to the nearest medication, uh treat, uh, assisted treatment provider. Mental health providers per capita. Substance use trip facilities per capita.

Uh, the second domain was the continuum of SUD support. So this is things like recovery residences per capita. The presence of drug courts, um, and a policy environment score. And we'll talk about that a little bit more [00:13:00] later. Uh, we're gonna dig into these a tiny bit more, but we looked at state level policy.

And we looked at, at, uh, a list of state level policies and whether they were present or not present within every state in the nation. And these were policies that supported people in recovery within their states. And from this, we came up with this policy environment score. And essentially every county within that state, it's the same score, but really that policy environment

allows you to build these support systems or not build these support systems. So we thought that was very important. And then finally, we have these four measures that look at social and infrastructure issues. And these are things that, that very, uh, uh, directly relate to a few key areas that we think are important for, uh, for strong recovery ecosystems, one of which is transportation.

So we looked at vehicle availability, uh, housing availability, so severe housing cost burden, [00:14:00] broadband access, and social associations. What I will tell you is that these are not necessarily the best measures for some of these issues. We would love to have more precise measures of recovery housing, for example.

Um, but, but a lot of the data just isn't available at the national level in a way that supports the development of a national tool. So some of these are proxies that get us at least an approximation. Get us a little bit closer to those underlying factors that we think are important. Go to the next slide, please.

So this is, this is really, I think the end result of that, of that journey. This is what the Recovery Ecosystem looks like when we map it nationally. So the brown, uh, you'll see the, uh, index on the right. The one through five. Brown is the lowest recovery ecosystem score. The deeper blue, the greeny blue is the highest recovery [00:15:00] ecosystem score, and you can see, uh, around the country the areas that have relatively strong and relatively weak recovery ecosystems.

Megan's going to give you a demo of the tool, but what I want you to know, and she will show you this, is that within this tool, you can click on any county and access data for your county for each of those 14 indicators, and you can see how your county compares within your state and compares to the nation. Because the power of data is putting it back in the hands of people who are working to make a difference at the community level.

And that's really what this is all about. Go onto the next slide. So, just real briefly, um, I, I already walk you through these, but these are those SUD treatment indicators. What I want you to see are the data sources and the data definitions. All of this is clear in the tool. Uh, when you go onto the tool, and we'll share the website, I'll, I'll tell it to you now.

We're going to tell it to you many times during the presentation. It is [00:16:00] REI, uh, Recovery Ecosystem Index, [rei.norc.org](http://rei.norc.org). And at the bottom you will see a tab for, for methods. And within that you'll see all of this information about the data sources and definitions. Um, what I, I'm not going to read all this to you, but, but you see it here.

What I want you to also see if you go to the next slide though, is that you can map all of the individual component scores. So if you want to see SUD treatment scores, you can look at that separate from the broader tool. And one of the things I'm, I just want to start directing you to, because it's something that, uh, relates to some other work we're going to talk to you about a little bit, but it's something that already starts to pop out in this tool.

So Megan and I did a study, uh, a few years back now, looking declining overdose mortality rates in Eastern Kentucky. And, uh, we were really stunned by [00:17:00] what was happening in Eastern Kentucky and the progress that was being made. And as we start to look at the Recovery Ecosystem Index, Eastern Kentucky shows up in very positive ways within this index.

So again, this kind of validates some of the on the ground learning that we've already experienced. Uh, go onto the next slide. So these are those, uh, other indicators I mentioned on SUD support. Uh, and, and these are those six indicators. Again, same thing. You can see all of the data sources, all of the data definitions.

If you look at the bottom, you have that policy environment score. Uh, going to the next slide. These are those policies that are included within this. So again, this is scored one to 10. So essentially you get one point for every one of these policies that you have in place and within the tool we do share with you which of these policies are in place in your state, which ones are not in place in your state.

We believe that all of these are [00:18:00] very important policies to support a recovery ecosystem. So again, putting data in the hands of people who can advocate to make a difference in their state, to tell their states we need these policies to support people in recovery. If as you look at this, you see that some of these policies are not in place in your state, uh, we think they're important and we want you to know that.

Uh, go on to the next. And just as I showed you before, you can map this domain separately as well. And here you see that continuum of SUD support scores. Again, you see that Kentucky does very, very well here. Uh, one of the things I'm sure you're starting to notice, and we'll talk about this in a little bit, is that the middle of the country seems to be the areas which has the deficits in terms of SUD treatment and SUD support.

Um, one of the things that we have observed is that those are also the areas that have relatively lower overdose mortality rates. So if [00:19:00] overdose mortality has not been an issue within your region, you're probably not investing to build treatment and support services. So again, this is one of those things that does make sense.

Uh, the areas where we have seen less of a problem, not that there is no problem, we don't want to say that. Within all of these states, there are pockets where there are big challenges, but relatively speaking, uh, where the rates are lower, we see lower investment in terms of building recovery ecosystems.

Uh, next slide please. And then these are those last four indicators. So these map differently because these are indicators that talk about other types of social factors; vehicle availability, housing cost, broadband access, social associations. These do not necessarily correspond directly with SUD within your community, even though they are important in terms of providing an environment which is going to be helpful for people [00:20:00] in their recovery.

If you go to the next slide, uh, this is what I'm talking about, they map a little bit differently. You suddenly see that the middle of the country, does a little bit better here and some of the areas where we have had, uh, greater challenges with SUD actually struggle a little bit more here. And if you go to the next slide, this is what I'm talking about a little bit here.

So now what we're doing is we are comparing the Recovery Ecosystem Index on the left to a map that we created of Drug Overdose Mortality on the right. So on the right, the darker the blue, the higher the overdose mortality rates. And again, you see, uh, central Appalachian, you see the northeast, you see several counties in the southwest.

Those are areas that have greater challenges in terms of, uh, substance use disorder mortality. The middle of the country, as I was saying, is relatively less challenged. And [00:21:00] again, it's almost the inverse of the map that we show on recovery ecosystems. And again, it makes sense to us because these are the areas which have needed to invest or not needed to invest.

And that's kind of how it plays out when we compare the two. If you go onto the next slide. So this is where I am going to hand things over to Megan, and this is actually a picture of the tool as you will see it when you log onto our website. Again, [rei.norc.org](http://rei.norc.org). And she is going to walk you through a demo of what you can do with the tool.

**Megan Hefferman:** Great. Thanks Mike. Thanks for, uh, setting the foundation for everything that is in the mapping tool. Um, what I'll do now is go through a few screenshots to show you some of the tool functionality. Um, and we can again, at the end open it up to questions if there are questions about specific areas or functionality of the tool,

I'm also happy to pull up the, um, live tool and screen share that at the end. But for now, we'll just go through a few of these, um, screen shots. [00:22:00] So what this is showing, like Mike said, is the base map of the overall recovery ecosystem score. Um, so that is the sort of summation of all of those indicators. Um, as Mike mentioned, you do have the ability to actually, um, look at different sub-components.

So you can select either the SUD treatment, the continuum of SUD support or the infrastructure. Those are all on the left panel and you can click on that and then see the corresponding. You also on the next slide, um, you can see this is the drug overdose mortality that we were showing earlier. So there's actually four, um, different selections that you can pick here.

Um, we typically in these mapping tools aggregate five years of overdose data. The reason that we do that is because we want to be able to show data for as much of the country as possible. Um, and as we get into smaller numbers, so especially at the county level, , [00:23:00] and particularly for rural areas, if you look at 1, 2, 3 years of data, there are often not enough deaths in the CDC mortality data to be able to display a rate.

So we typically aggregate five years of data to help us with that. And so what you see here is this is, um, 2016 to 2020 data. That is our most recent time period currently. Um, the data from CDC lags a bit in terms of when they release their mortality data. So currently 2020 is the most recent data we have.

Um, and then there is an earlier time period, which is the five years prior. Um, so you can actually select either of those time periods for drug overdose mortality, and you can also, um, look at the data for opioid overdose mortality. One, one thing that I will just note in caveat is that, um, we typically tell people to use the overdose mortality over the opioid overdose mortality just because there are some limitations in different states and how that, um, subcodes are [00:24:00] specified for the opioid overdoses.

So it certainly can be useful information to look at, but the, the overall overdose drug overdose mortality data tends to be more reliable. So on the next slide, um, what I am showing here is, um, one of the features of the tool is that you can actually overlay other variables and factors on top of your base map.

So you can select, like I said, the various recovery ecosystem scores, and then you can also select, um, drug overdose mortality at the base map. And then you can also overlay a number of different factors on there as well. So what we have selected here is a drug overdose, um, mortality overlay on top of the recovery ecosystem score.

And what this does is it starts to show you a little bit of that, um, association that Mike was talking about earlier when we had the maps side by side. Um, and there's a few different ways that we can, you know, get this information and data, but this is [00:25:00] a visual representation that can start to show you some of those areas.

So in this instance, the pink bubbles, the larger the bubble, the higher the Drug Overdose Mortality Rate. And so what you can start to see is some of the areas where there are those blue colors, which means that there is a stronger Recovery Ecosystem Index. They also oftentimes do have higher overdose mortality rates as well.

Now, where I think this can be potentially become very powerful, especially at the community and local level. Local level is starting to look at those places where there are divergence between those factors. So where are the areas where you see a larger bubble, meaning that there is a, you know, above average drug overdose mortality rate, but they still are in the brownish colors, you know, in that 3, 4, 5 range for the recovery ecosystem score.



Um, are there places where they're. Is a need for more services, but there is still a [00:26:00] gap. Um, so I think that's, you know, one potential way to start to look at some of this data and really start to identify some of those gaps, um, and some of those areas that are, um, needing more support. Um, so on the next slide, um, this is looking at this, um, from slightly the inverse.

So what we have here is we actually have, um, drug overdose mortality, um, on the base map. And for this one, we're actually looking at that earlier time period. So you'll see here that um, the areas with the dark blue are a little more concentrated. You really see that central Appalachia, um, West Virginia, Eastern Kentucky region showing up in this earlier time period.

And this is sort of, again, teasing ahead something Mike's going to talk about later. Um, What we also have here overlaid is the substance use, uh, treatment score. And for this one, the lower the score is better. So the smallest bubbles are actually the best ones here. And so you can start to see that in a lot of [00:27:00] those counties with the dark blue in, in central Appalachia.

Um, you see that they also have some of those smallest circles for, um, meaning that they have more, uh, substance use treatment availability. So Mike will, talk a little bit more about that when we describe some of the work we did in Eastern Kentucky. Um, and I will note, I saw, I was looking at the chat earlier while Mike was talking.

I saw some familiar names and organizations that we talked to in that Eastern Kentucky work. So, um, it's always great to, to see you all and be able to, um, bring that, that work back to life. Um, so on the next slide, um, again, some of the other factors that you can also overlay. You can overlay some sociodemographic information.

You can also overlay some economic factors. Um, now these economic variables are not a part of the index itself, but they do allow you to start to see what are some of the other factors in these communities and the other things that might be impacting the availability or, or the ability to [00:28:00] create this recovery ecosystem.

And so, which you'll see here again, is the standard base map with median household income, um, overlaid on top of the map. Um, and on the next slide I think is where I show, So we also have this feature to see the correlation. So, um, this is not necessarily for everyone, but for those who are more into the data and getting in the weeds on things, um, on the top, uh, left part of the, the screen there.

Um, What would say Open Correlation Graph. And that's when you click to, to see this graph. Um, and what this will show you is the correlation between the two variables that you have selected. So here we have the recovery ecosystem score and then the medium household income. And just something that I think is interesting as you start to explore this.

Um, I mentioned earlier, that looking at the bubbles on the graph or on the map is one way to start to identify some, you know, outliers or maybe some places to focus on, um, these, uh, these [00:29:00] graphs, even if you're not really into the data or the correlation part of it, I would suggest you look at them if there's factors you're interested in because you can actually hover over each of those little dots and it will tell you what county that is.

So, You look at this, you can see that the fives are the, the lowest recovery ecosystem scores, and you could actually hover on those top dots for, um, actually, sorry, that's talking to one I'm going to show next. But what this one is showing is income. So this one actually does have another interesting factor that I think you can see here, which is you can see that that income

with the bracket there sort of narrows as you get to the, from the ones to the fives. So you can see in the strongest recovery ecosystem, you really have the widest income level. So there might be some counties that just have enough resources, um, to be able to provide these services. Now, as you get down to a smaller medium household income for the county, you see that you trend towards the lower recovery ecosystem [00:30:00] scores.

So on the next slide, I think is where I talk about, Sorry, it's very small on my screen. So I've tried to, uh, look at these slides. Um, so what we have here is, um, more of what I was just talking about. So here we have, um, drug overdose mortality, uh, overlaid on top of the, uh, recovery ecosystem index. And this is where you can start to hover over those

dots. So particularly if you look in like the four sections, there are some outliers there that have higher overdose mortality rates, and those are places where you can hover over that and see what are the counties that are showing up there and are those areas that, you know we need to put more focus on.

Um, on the next slide, here's just another example of this. I won't go into too much detail on this one, but again, for any of the, um, combination of two things that you have selected on the mapping tool, you are able to create these, um, graphs and overlays. Um, [00:31:00] so on the next slide, Just wanted to highlight a few overlays.

Um, we call these sort of contextual or additional map overlays. And these are just going to show you outlines or sort of locations of things on the map. So they're really intended if you are living in a specific area or you work in a specific area and you want to let say, highlight the Appalachian region, you can select that and you actually see the outline of that region.

You can also see the location, Native American Reservations, um, persistent Poverty counties, um, and then also major highways as well. Um, so those are all features that you can actually overlay on top of the map. Um, on the next slide, Um, so Mike, Mike touched on this, um, this is probably what people are most interested in on these tools is the individual, um, county level data.

So you can actually go, when you're hovering over any county, um, you can. Click on view [00:32:00] details. Um, when you hover over it, it will show you the two things that you have selected. So in this instance, we have the base map of the Recovery Ecosystem Index, and we have the overlay of Drug Overdose Mortality.

So you can see both of those data points very clearly, and then you can go to view details and it will show you the county fact sheet. Um, so on the next slide, It shows what this fact sheet is going to look like. So, um, I imagine this is probably pretty small for people, but I will just give you a, um, summary of what this is.

So, for every county in the US it's going to break down each of those three components. It will tell you the score that you have for that specific component. It will tell you your Overall Recovery Ecosystem Index Score, and then it will give you the data for each of the indicators that are a part of that score.

Um, and so here what you can see is it shows you your county that has selected your state and the United States for those benchmarks and comparison. Um, you also in the [00:33:00] dropdown right above the scores where it says Select Data Table, right now we have the Recovery Ecosystem Index selected. But if you go to that dropdown, you can also see the other data overlays and the data sets that we have included.

So I think on the next slide, it will show the Drug Overdose Mortality. Um, so here is where we have selected, um, Drug Overdose Mortality in that drop down. And you can see those four data points I mentioned. So the two time periods for both, um, all drug overdose and opioid overdose. And again, you can see the um, county, the state, and the US.

Mike talked about the policy piece. Um, and so that policy's piece is here at the bottom of, um, each of the pages of the mapping tool. And so what you can see is, um, you know, what are the various statutes that are in place, um, what are the various policies for the ones that are currently in place. The one thing that we do have a note on of this, on the tool, it's not.

Slide. [00:34:00] But, um, one thing I do caution people on for these policies is that we have compiled and aggregated all of this data from existing resources that, um, collected this information. So some of these policies may not be, you know, policies are always changing. So some of these policies may not be the most up to date.

Um, but that is all described in the methodology page of the tool of sort of when this data is recent as of, um, and so. It starts that conversation, I think. And one thing that, um, when we were talking about this sort of as a team of, um, what to do with this policy piece, one thing that we talked about is how sort of what a, a state's policy was, you know, even if it is two, three years ago, sort of does reflect what that general recovery ecosystem might look like from that policy environment.

So we felt like it was, you know, worth including, even if it did have some limitations in terms of the data. Um, you know, how, how, uh, recent the data is. Um, and I, on the next

slide I think is where I [00:35:00] highlight Yes. So this is on the, um, Methodology and Data Sources page of the tool. On that, on that main homepage is where you can find all of the information about the data, the data sources, and where, what the definitions are and what the time period is.

Um, so. This is a question we often get is what is the time period for this? And it is a bit of a mix. So just by the nature of some of these data sources, they come out at different times, they have different lags, different availability. So, um, what we have tried to do is pull together the most recent data available at the time that we were creating this, but that does not always equal the exact same time period.

Um, for more information on that, you can go to this tool and on this page and it will tell you what, what time period you're looking at. Um, the other thing I just wanna flag on that one really quickly is on the very top of that one, it had a link so you can actually download the data and all of the source data that is included in this tool is downloadable [00:36:00] at that link.

Um, so that is every county in the US the score for all of the indicators, their, um, summary scores, so the one through five for all the indicators and all the drug overdose mortality data. Um, so that is, I think if you are truly interested in really digging in and comparing counties or looking at different places, I would recommend download the data.

Cause it will be much easier than trying to go county by county and look at things on the tool itself. Um, so we've said the link a few times. I think I put it in the chat, but, um, It was released last month and it is available now live at [rei.norc.org](http://rei.norc.org). It is all publicly available, free to use, free to download.

Um, and we welcome any questions that people have. You know, we'll open up to questions in a bit here, but, um, any additional questions that you all have, we welcome. You know, we're happy to do walkthroughs with you if it's something that you or your staff might be interested in. And we're really trying to get this out there to people who are on the ground, like you all.

So, um, [00:37:00] we welcome any. Um, any additional thoughts? Um, so I think now it goes back to Mike for a few slides just on that Eastern Kentucky work that we were talking about.

**Michael Meit:** Yeah. And, and this is a great place to end, I think, because to me this is such an inspiring story. So, you know, we, we always like to say that recovery is possible, and you know, I think one of our messages to you is that recovery ecosystems are possible too.

Um, so what you have here is a map of Persistent Poverty in the United States. And just to kind of put this concept in your head, and it's, it's a concept that to this day still blows my mind. To be defined as a Persistent Poverty County in the United States, more than 20% of

your residents need to live below the, uh, below the federal poverty line since the 1980 Census.

80, 90, 2000, on up. So these are counties that have had more than 40 and [00:38:00] closing in on 50 years of intergenerational poverty. Um, these are very poor places in our country. The reason I say this is that you see Eastern Kentucky circled here. If you can just click one more time, you'll zoom in. So if we talk about social determinants of health, we would say, this is an area that struggles with social determinants, and if we believe that determinants are in fact determinant, we would say that nothing positive could be happening here.

It would be really hard for communities in this region to turn the corner, and yet, if you go to the next slide, So this is a different map and what you're looking at here are two data points. So this compares data over two, five year time periods. First time, time period, 2008 to 2012. Second time period 2013 to 2017, which is when we did this study.

Uh, actually we did the study 2019, but data lags by about two [00:39:00] years. But that was the most recent data available at the time of our study. When we looked at the increase or decrease in overdose mortality between those two time periods, Eastern Kentucky stood out. So in these maps, these are maps of different states within the Appalachian region.

In these maps, the darker the green, the greater the decline in overdose mortality. The darker the orange, the greater the increase in overdose mortality. And low and behold, in Eastern Kentucky where there has been. persistent challenge with, with economic development, uh, economic opportunity. Um, that's where we see the greatest decline in overdose mortality.

It's unexpected, and it's a really cool story. So let me just tell you how unexpected this is. So when Megan and I notice this and, and actually I don't want to take credit for noticing this, so we actually got a call from a reporter in Lexington, Kentucky who was looking at our tool and called to ask us why overdose [00:40:00] mortality rates were declining in, in Kentucky.

We didn't even know it. We were looking at this national map. We hadn't gone county by county, so he's the one who clued us in. So none of this would've happened without a really, uh, top-notch reporter clueing us into what was happening in that region. We then went to the Centers for Disease Control and said, there's something happening here that we need to explore.

And the people at CDC said, You must be looking at the data on because there's no way this is happening in Eastern Kentucky, cause that's an area known for having exceedingly high overdose mortality rates. Um, they were very nice. They were gracious. But, but didn't believe it. We got a call back from them a few weeks later where they analyzed the data themselves and they said, You know what?

This is actually true. So we did what's known as a positive deviance study where we met with many of the people on this call. We met with people all throughout Eastern Kentucky to try to

understand what people were doing in Eastern Kentucky that was [00:41:00] moving the needle on overdose mortality. Go on to the next slide.

So these are, This is a list of eight counties in Eastern Kentucky. And just to kind of put, put a finer point on this, there are 3,124 counties in the United States. When we looked at the 10 counties with the steepest decline in overdose mortality, eight of those 10 were in Eastern Kentucky and, and these are those eight.

So when we did this study, the overdose mortality rate was around 25.5 per hundred thousand. You can see that the declines are more than that, and every one of these counties really amazing. Really something to celebrate. At the same time, I also want to point out that when you look at the drug overdose mortality rate 2013 to 2017, all of these counties still have work to do.

They still have higher than national, higher than the national rate in terms of drug overdose mortality. So, [00:42:00] you know, nobody wants to, to declare victory prematurely. There's still a lot of work to be done, but there's something here that happened that we need to celebrate, and that's what we were trying to learn.

If you just go to the next slide. This is essentially the key findings from this study. Uh, what we learned was that there was a major effort throughout Kentucky to increase access to treatment. This began prior to Kentucky's Medicaid expansion with treatment vouchers. But once Kentucky expanded Medicaid, there was suddenly a lot more resource because they included an enhanced substance use treatment benefit.

There was suddenly a lot more resource and a lot more providers could open up slots for a lot more people. Uh, so suddenly there was much more on demand treatment. That treatment was linked to employment training and second chance employment. And surrounded by other recovery community initiatives like recovery housing.

The criminal justice system got on board. There are now [00:43:00] many, many judges throughout Eastern Kentucky who are more likely to refer people to treatment than put them in jail. Uh, the state police in Kentucky, you can, They have a program called the Angel Initiative. You can go into a police barracks and they will help you get help.

They will take you to treatment. Kentucky has the most harm reduction program, uh, programs of any state in the nation. A lot of community efforts to reduce stigma, create uh, opportunities for children, and mentorship and primary prevention and on and on and on. So we did this study three years ago and we, at that point, honestly didn't know what to call this.

If you just go to the next slide. So this is what we would call this today, is we would say that Kentucky built a recovery ecosystem. And you know when we went back and we started to look at all of our findings and started to circle the boxes on this guide, what we found was in fact, they were absolutely creating a [00:44:00] recovery ecosystem and it worked in Kentucky.

Now, here's the big caveat I do want you to know. At the same time, we do know that there was a shift in preference for substances being used. Um, so even as Kentucky was reducing overdose mortality by getting a handle on opioids, methamphetamine was expanding. So there are still challenges. And the other thing we know is we look at more recent data, is that overdose mortality is spiking due to Covid 19.

So Kentucky and every other state in the nation has lost a lot of ground during Covid 19, but here's what I want you to know. As we work our way through the pandemic and as we start to stabilize and move forward, Kentucky still has the programs and structures in place to regain that loss ground in a way that all of our other states, including [00:45:00] my state of Tennessee, but all of our other states should emulate.

Uh, Kentucky is going to do a lot better in their recovery, I believe, than the rest of us. So that's where I want to leave you with. Again, I think it's an inspiring story, and to me it's an absolute example of how recovery ecosystems can make a difference. And if you go to the next slide, I think we are ready to take any questions anyone may have.

I already answered a few in the chat, uh, but I think there were some good questions there that we can continue to raise as well.

**Janice Fulkerson:** Yes, Michael, we have lots of questions coming in. Um, one of the questions is, uh, um, about how frequently the tool will be updated. Do you plan on updating the tool, you know, monthly, yearly?

**Michael Meit:** So the data that are included in the tool are typically reported annually. And we are talking about that now [00:46:00] about, um, how do we retain resources to continue to support this tool, moving forward. Uh, we also have our Overdose, um, Mortality Tool or Opioid Misuse Tool. Um, and it's the same thing where, where we continue to try to get resources to do annual update.

**Janice Fulkerson:** Great. Thank you. Thank you. A follow up question that's related, um, a couple of folks, um, are wondering about age adjusted mortality rates in the tool.

**Michael Meit:** You want to take that, Megan?

**Megan Hefferman:** Yeah. These, uh, these are Age Adjusted Mortality Rates. We do, Um, we've been doing this for while, and I actually am linking into the chat now to our, our opioid tool because it's, um, you know, it certainly might be of interest to people as well.

The, uh, the thing I will note with that, and then I want, So the question is, um, like Mike said, we have had a bit of a lapse in our funding for that. So that tool. If you're looking for overdose data and you want more recent data, use the Recovery Ecosystem Index one. But the Opioid Tool might have a few things that, um, you might be [00:47:00] interested in.

That tool is only through 2019 currently, but we're hoping to be updating that one soon. Um, to the question on age adjusted, they are age adjusted. We also look at the um, uh, 15 through 64 age group when we do the overdose mortality. So we're trying to focus on that, um, age group. So it is age adjusted, but it that it is bounded by those age ages.

**Janice Fulkerson:** Great. Thank you for that. Uh, question about, uh, some of the demographics. We've got two or three questions about demographics and populations such as Hispanic, African American, and indigenous populations being represented in the data.

**Michael Meit:** Yeah, and, and I've started to answer one of those, um, in the chat there, there was a question about whether we had data for Native American populations and, uh, the, the overdose mortality data that we include is county level data.

It is not broken down by subpopulation groups. However, within the tool we do have, particularly for the Native [00:48:00] American population question, we do have an overlay. Where you can click the box and it will overlay the boundaries for tribal reservations on top of the maps. And you can put that on top of either the Recovery Ecosystem Map or the Overdose Mortality Map.

Uh, the reason we did it that way is that tribal reservations do not align with county boundaries. So it's kind of the best approximation we can do to kind of show where our tribal lands and kind of what are. Issues in the, the counties that, that underlie those tribal reservations.

**Megan Hefferman:** Yeah. And the one other thing I will add to that, um, like Mike said, the, because we sometimes have people ask about this, the, the data just gets so small that breaking it down at the county level by demographics is very difficult besides in sort of larger, larger population hubs.

Um, I think I noticed a, a comment earlier [00:49:00] in the chat about, um, you know, how it looks like there might be some populations that are, that are lagging. And I think that if this is a really interesting question and this tool does have some ways to start to look at that, this, and so you can actually overlay demographic factors so you can see sort of what the demographics are in the county.

Now. Just remember when you're doing that, that it's not showing. The overdose rate is not going to change for that specific demographic group, but it's going to show you the overall overdose rate and it's going to show you the demographics. And I do think there's an important thing for us to look at with this, which is to see in some of those areas where we see the, the browner colors, the lower scores, um, you know, are there certain factors that

are present in those communities. Are there areas that have higher overdose mortality that are still, you know, under resourced in these areas? So I think by adding some of these overlays and looking at this and diving in it from different angles, you can start to look into that. Um,



and again, then the other benefit of being able to download all the [00:50:00] data is it has, um, all of the, that demographic data as well.

So if you, let's say, wanted to, you know, look at your state and then sort it by a specific population group and see what the rates are, you would be able to do that. So there's a lot of flexibility in how you can explore the data.

**Michael Meit:** And, and I just want to highlight one of the points that Megan just made, cause to me, I think, you know, what are the next steps?

What would I like to see happen? Um, she just hit on one that I think probably deserves a little more attention, which is, looking for those counties that have low recovery ecosystem scores, but high overdose mortality rates. So, and I talked about how typically if you have high overdose mortality rates, that's where we see the, the stronger recovery ecosystems.

There are still many, many counties where those things are not aligned. So when we're thinking about where do we need more supports for people in recovery, where do we need technical assistance and investment? I think it's those places where there is a large [00:51:00] challenge in terms of overdose mortality, but not a lot of these systems and structures in place yet.

Um, there, there was another question as well that I do want to go back to. Somebody had. They'd said that, and many of you may find this, they said that they looked at some of the resource information and it was not accurate for their county, and they wanted to know if they could update that. So this is something that we have heard a handful of times now.

And it is a very legitimate issue, and it is something that certainly concerns us as well. The problem is this, we pull this data from national data sets and our data is, at the end of the day, is only as accurate as those national data sets. So to the extent that some of these programs are not reflected And, and are not, are not, uh, known by agencies like SAMHSA, where we get some of this data.

It's not going to show up in this tool. And unfortunately, just the [00:52:00] resource that it would take to make that data accurate for every county in the country is just way beyond the scope of what we can do. But it is an issue. It is a limitation, and it's something that people should be aware of.

**Megan Hefferman:** Yeah, and I think just to add on that, you know, The SAMSA data is sort of something we're pulling at, you know, a point in time.

So, we pull that data from SAMHSA at this point, cause we had a lot of work that went into building this itself. I, I don't quote me on this, it's in the tool, but I think it was probably around February of last year. So, you know, that I know is ever changing. I think it's another,

you know, reminder of the importance of like getting, like Mike said, sort of getting in those national data sets.

So, um, I think that, you know, a lot of it's coming from the, like my treatment finder SAMHSA data. Um, and so I, I'm not actually as familiar with how you like, get into that if you know you have a service that's not in there. But, um, again, we're pulling from a lot of these national data sources, which, which is a challenge.

Um, and I do think, you know something we are exploring some [00:53:00] potential future work for this and ways to kind of validate it and look at it, I think would be, we would be interested in hearing like, are there specific areas that there is this gap? So, you know, we're definitely interested in hearing if you feel like this does not accurately, you know, represent your resources.

We'd love to explore why that is and how can we try to, you know, make it so that it's as accurate as possible. Cause that obviously is, um, the end goal here is having this as accurate as possible.

**Janice Fulkerson:** Fantastic. We have a couple of folks who are asking, can I share this webinar and this map with other people? What are the, are there any limitations in downloading, copying, sharing, forwarding?

**Michael Meit:** Not at all. This is all publicly available. Uh, this is federally funded using existing secondary data from, uh, federal resources.

Everything in here is public, and the reason we developed this is to get [00:54:00] this in the hands of everyone, everywhere. We would love if you helped us to get this disseminated out, so please feel free to use it. And if anybody has any questions as you do that, please feel free to send 'em our way.

**Janice Fulkerson:** Fantastic. Thank you and I'll make sure everyone knows that uh, this presentation will be on The Fletcher Group website next week. You'll be able to preview it again along with the slide deck. Um, please look for future information about other webinars and, uh, stay in touch. If you haven't signed up for The Fletcher Group newsletter yet, you can also do that on The Fletcher Group website, and that's how you learn about this kind of information and tools and others as well. Um, any final comments, Megan or Michael for the group before we close out today?

**Michael Meit:** I don't think so for me, I, um, I [00:55:00] appreciate the opportunity to talk to everybody and again, we would love to continue this dialogue. So if anybody has any questions, uh, please let us know. And as Megan said, um, you know, we, we know that this is not perfect. This is a starting point. It is a I think a thoughtful first effort, but we see this as version 1.0, and with your input, we would love to continue to refine it moving forward.

**Janice Fulkerson:** Great. Thank you, Michael. Megan, any final comments from you today?

**Megan Hefferman:** No, I don't think so. Thanks everyone. I, I think there's, um, I just wanted to acknowledge, I think this is a really interesting comment in the chat about, uh, research for counties that, um, maybe have a similar ecosystem score to Eastern Kentucky but didn't see some of those declines.

So, you know, what are the other factors that are in play there? So we're definitely thinking about sort of what future research might be that could come out of that. So I think that's, um, a really interesting idea. I think there's probably a ton of different ways, different slices to take the, uh, to [00:56:00] look at this for.

And you know, obviously we know that, um, you know, Covid will be, looking at the impacts of covid will be an important one. And, um, like Mike said before, you know, likely places that had, um, supports in place are both you know, potentially able to recover, but also, you know, might have been places that were almost hit even harder because they, they had such good supports in place that when that safety net went away, when people weren't able to access their meetings or weren't able to access their providers during that initial Covid phase, you know, it could be that some of those areas ended up seeing, you know, almost more of an increase in overdose mortality than maybe somewhere.

People always kind of had to get by with less resources. So that's something that kind of just came to my head, as I was talking now. But, um, this is why we love presenting this cause we always have people giving us new thoughts and ideas on ways we might be able to move this work forward. So, um, thanks everyone for your attention and I think Mike, Mike and I both put our, um, uh, [00:57:00] contact information in the tool. So, um, please feel free to reach out if you have any additional questions.

**Janice Fulkerson:** Absolutely. Thank you, Michael. Thank you, Megan. We really appreciate the partnership and the ability to share tools like this with all of our clients and people looking to expand the recovery ecosystem across our US states. So thank you. That concludes our webinar for today.

**Michelle Day:** This concludes our webinar session. Thank you so much for joining us today. Also, please tune in on the first Thursday of each month from 2:00 PM to 3:00 PM Eastern Standard Time, where we will be hosting subject matter experts from across the nation to bring you valuable tools and resources for rural recovery house operators and SUD professionals.

If you would like information on technical assistance, you can go to our website again, [www.FletcherGroup.org](http://www.FletcherGroup.org), which I have also copied in the chat, [00:58:00] and submit a technical assistance request. Lastly, please take a moment to respond to the survey questions once they become available on your screen.

Your feedback is very important and greatly appreciated. Thank you and have a blessed day.