Region IV Public Health Training Center
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Leading Public Health: Data-Driven Leadership

Episode 3: Baseline Assessments

Liz Kidwell (LK): Welcome to Leading Public Health, a podcast from the Region IV Public Health Training Center at Emory University. Through this podcast, we explore current leadership challenges, strategies, and ideas to help build the capacity of the current and future public health workforce. In this series, Data-Driven Leadership, we explore the essential role leaders play in incorporating fairness into program evaluations. You'll gain valuable insights from experts who share practical tools and strategies for measuring and enhancing program impact. This series features pre-recorded sessions from a Project ECHO initiative offered by the Region IV Public Health Training Center, the Injury Prevention Research Center at Emory, and Safe States Alliance.

Today, we're exploring an important step in evaluating public health initiatives—baseline assessments. Understanding the starting point of an intervention is crucial for measuring progress, identifying challenges, and ensuring that both the problem and the community context are properly considered. We will hear from two experts in evaluation. First, Dr. Jan K. Fields, an experienced evaluator and healthcare professional with a background in respiratory therapy and public health evaluation. Dr. Fields has worked extensively in evaluation, including a fellowship with the CDC's National Asthma Control Program and his current role as the program evaluator for Michigan's Overdose Data to Action program. And Dr. Jen Gathings, Senior Research Associate at ETR Services, a HUB-certified business specializing in evaluation, research, and technical assistance. With over 12 years of experience, Dr. Gathings' work focuses on program evaluation, applied research, health impact assessments, and capacity building.

In this session, we'll explore why baseline assessments matter, key terminology, and the differences between primary and secondary data. All resources shared in the episode will be linked in the show notes, so be sure to check that out after you listen. Lets dive in.

Jan Fields (JF): We are going to talk about the baseline assessment of the problem being addressed by an intervention and the baseline assessment of the community where the intervention is occurring.
So these assessments may be useful for evaluating the intervention itself and for evaluating whether the conditions in the community, which you know, starts to get at the drivers of inequity, are influencing the effectiveness of the intervention.
First we are going to cover some basics like why is baseline assessment important? Baseline assessment terminology kind of clear things up and then primary versus

secondary data, because we will be talking about those two types of data when you talk about baseline assessment.

So, baseline assessment, it's important when we're thinking about the problem, provides justification of policy makers, funders for an intervention designed to address the problem, sometimes tied into the needs assessment as well. And informed program decision making, providing reference points so you can tweak the program here and there. Much better for using that than let's say you know, surveillance data, which you know, you can't attribute the stuff that you're doing to changes in surveillance data per se, contribute, sure, but not attribute. And then also from, you know, when we're thinking about assessing the community, assessing the influence of inequities, drivers of inequities on the effectiveness of the intervention and for most community engagement, as you start to kind of think about that assessment, you bring other people from the community into the conversation and that creates engagement. So those are good, good things. And as far as terminology, we talk about baseline data that represents the nature of the problem or the condition of the community. So we'll talk about both and we look at that before the intervention is developed or let's say the intervention has been going, you know, for a while and then you want to change something, it can count as a before the intervention and then you use it for comparison. And then a baseline assessment is using that baseline data to do this. So it's just the actual collecting and the analysis of the baseline data and then it can be used for our evaluation. Then there's needs assessment, that usually refers to collection analysis of data to identify needs and design an intervention. So it's usually done like one time and then, you know, you put your program together and you go from there. But you can also use your assessment, your needs assessment to set your indicators for which then you can trend over time and then it acts more like a baseline. So that would be part of your baseline assessment. And then of course, there's the evaluation, which this whole course is about judging the worth, merit, and significance of the intervention. And that can contribute to the findings of evaluation if it's done, you know, before and after you do different aspects to the intervention. Indicator, something that shows what the situation is like. So when we're talking about baseline assessment, it is the baseline data that you're using. So you're tracking that both from the influence on the problem and both on the influence on the community or of the community. We sometimes use indicator measures interchangeably. Some people don't like to do that. I used to not like to do that. Now I'm just a little bit more loose, I guess. But we're going to use the word indicator. And then benchmark is a desired indicator or even objective based on existing standards and best practices. And you could use a benchmark to be part of your evaluation because you can see whether or not you're reaching that benchmark. The needs assessment can be used to determine the design of the intervention. And then which indicators that can be used for the baseline assessment. And then the baseline assessment can use the assess the nature of the problem and condition of the community. And then also it'll produce indicators that can be used as benchmarks. And then evaluation determines the value of the intervention, including its effectiveness and efficiency. And then that value is to come in part by using benchmarks. So you can see how all those work together.

Then primary, secondary data. Primary data, refers to original data collected directly from the source. It could be interviews, focus groups, surveys, you know, stuff that you

kind of gathered yourself. The pros useful for measuring individual level impact. Harder to do that with secondary data. Sensitive to programmatic adjustments. Really better for decision making, I think, but it tends to be costly to collect and analyze and there's secondary data, which is existing data, someone else collected it and it can be repurposed in this case for, you know, program decision making useful for measuring system level impact, less costly, but may not account for demographic and cultural differences. And I think too, it's not as sensitive to decision making on the fly, you know, where you want to make small adjustments in your program. So yeah, so that's, you know, that's the first piece of this. So basically we're looking at using this to assess the problem and then assess the community. That's that's the whole point of the presentation. So there we go.

So then let's look at the problem we are going to look at to see specific surveillance data and journey maps. Both of those can be used to do a baseline assessment of the problem. But before we jump into that, I just want to make a note: Wicked Problems, I don't know if you've heard of that term before, but it's a problem that cannot easily be fixed. There's no single solution to the problem. And it makes it really, really difficult to address the problem and to evaluate whether or not what you're doing is working. So some of the things that jump out at me, it's like there's no clear problem definition. It can take a long time to evaluate. Problems are never completely solved. Every wicked problem is connected to another wicked problem. So those are really, really difficult things that we have to deal with in public health. We also call them predicaments. I've heard that before too. And with predicaments, you know, that's different than a problem. A problem has a solution, a predicament doesn't. So instead of looking for solutions, we tend to look for outcomes, which plays really well in, I think, to the evaluation piece of things because we are always looking at outcomes, not solutions. The first way that we can do a baseline assessment using secondary data is using disease- specific surveillance data. These come from again, secondary data, data sources, sources that have already been, you know, the data's already been collected and it's available to most public health programs. So, here's an example, with disease-specific surveillance data, and this just happens to be our dashboard that we use here in Michigan for the overdose. And you can see there's a lot of good information here. Over on the left, we can cover trends, demographics, harm reduction, specific drug trends, treatments, different type of treatments that are being, you know, applied. And then there's a vulnerability index that we get from the CDC and then we made our own deck index out of it. I'll show it to you. But you know, we monitor overdose deaths and overdoses that end up in emergency room where EMS responds to it. We're also, you know, monitoring the amount of opioids that are prescribed. We can do it by county. Anyway, you get the sense that we got a lot of good information here and we use it all the time. So this is huge. You know, this is a great and this is a type of baseline assessment.

Another one is what we call a journey map. And so these come from primary data sources using qualitative methods like focus groups, interviews, et cetera. So journey map actually comes for the for comes from the for profit world. So a common user experience tool UX initially used by businesses determine how the customers interact with their services and products. It's a visualization of the process that a person goes through to accomplish a goal. And now we're being used in healthcare providers and

public health professionals, including us, and we use what we call an SUD journey map, substance use disorder, visual representation of the experiences of an individual living with SUD. This is actually the journey met that we're playing off of. It was created under the authority of the National Institute of Drug Abuse, NAIDA, we say, and you could see there, there's actually 7 phases, but I got six phases up here.
Trigger events, getting help, care begins, treatment and recovery, lifestyle changes and ongoing support. And under each one of those you can see there's things that we can create indicators and to, you know, and to track. And that's what we're trying to do with our overdoses and using our quick response teams with them, collecting the data. What we did is we had two focus groups. One was made-up of people with lived experience and the other one was made a quick response team members. And we put questions to them that really kind of address, you know, where a person is that as they journey through this experience of having a, a substance use disorder. We were really able to flesh out a lot of the details that didn't even come out of the NIDA journey map. And so our intention is to use these data as baseline data that we'll track over the rest of the funding. Subsequent baseline data will be collected by each of our QRTs. We call them QRTs.

Those are quick response teams as they track the ongoing progress of recipients of their services. So they're going to be collecting data on these very touch points. This will allow us to visualize the relationship between information gathered from the QRTs, facilitate collaboration with our partners and interest holders, and then address the problem at multiple points and multiple iterations along this journey. So we're very hopeful about this. We're unsure just how that data collection ongoing is going to be. It might be kind of spotty initially, but we're very hopeful that this might be a really good way to do baseline assessment of a problem. So those are two things.

Let me stop sharing here. I'm sure the dashboard, the surveillance data and most of you are using that. The journey map might be a little bit of a new thing. It is a way to use primary data to create a baseline and then follow it. And we're kind of in the initial stages of it, so I don't have a ton of expertise on it, but yeah, we're quite excited. We just met yesterday. So our group, we bring all the quick response teams together and one in person meeting. We met in Flint, which is kind of central in Michigan for our quick response teams. And we had this conversation, you know, what does that journey look like and what should we be looking at every year, every, 6 months even to see how this journey changes over time and, and you know, and that'll help our understanding of the problem. So we're pretty excited about it, but does require like a initial, I think, you know, like a focus group thing where you really try to playoff. And we played off of that national SUD journey map to get some, I guess, validity to the process because they had already done that, you know, over a larger region.

Jen Gathings (JG): And I think the journey maps are such a great strategy if you're shifting toward a person-centered approach and your work. And we've used journey maps a lot and many different kinds of ways we've thought about them for program planning. When we create journey maps, we also include a series of questions that ask folks to identify pain points and happy moments as they're going through a particular journey. And that's been really useful for folks to think about how to leverage those happy moments or the successes and try to mitigate the pain points when they're going

through, you know, a program or an intervention. So, lots of really great ways to use the journey map for thinking with your team and planning programs and identifying outcomes to track. So, I'm really glad that you shared that with us today.

JF: Yeah, no, you're right. I, my son-in-law is a rheumatologist and they, they have what's called a symptomatic timeline, but they go way back, you know, and they look at trauma. I mean, it's a very trauma informed process. So, they can see all the different events in a person's life that led to where they're at now. And even that process gives them better understanding and and, and I think maybe less of a sense of being out of control, like, you know, some understanding. So, I think that really does help in general to do that.
So then using baseline assessment to look at the community where the intervention is occurring, looking at assessing context in general, then looking at community specific health data, a little different than disease specific. And then I'm going to introduce something called the racial equity lens logic model, not sure if you've heard of that. I just heard of that last year and we're just starting to implement it. And then something called the Qualtrics Community Pulse Tool, which is something that's offered by Qualtrics.

So, assessing context, maybe you might have seen this, but it just came out. We have a new icon new updated framework for the CDC evaluation framework and instead of having engaged stakeholders for the first step, it has assess context which would include assess the readiness to even evaluate it. It may not be at a point where you can evaluate that intervention, assess your interest holders and they use this, call it critical heuristic. And it's really, really cool. If you look at the framework, it, it, it, it divides them out into four different groups and, and there's a different way to approach each of those interest holders. And that's the word they're using for stakeholders, by the way. So, they're saying interest holders now place based context, which is what I want to talk. Then also what's the evaluation capacity of the program that you're evaluating? Because really most evaluations should be collaborative in nature. So, they're you really should be interested in their capacity to help out with the process.

But anyway, focusing on place-based context, this is what the CDC means when it refers to that. Well designed evaluations integrate the uniqueness of the place-based context in which the program evaluation are conducted. And here's what it means. The place dimensions can include program and community history, power dynamics, and the systems and structures that exist and how these factors intersect with current day realities of marginalized communities. So, we do understand that our programs operate in settings where factors outside the program might affect your, getting to your desired outcomes. So, understanding these contextual factors might affect the program's success. Documenting these observations might be helpful when you're trying to transfer or upscale or scale up a program to going to maybe a different context. So super important and I'm glad that they made that change in the framework. So one way to assess community, in this case this is something that we're doing but to assess more the county, we actually now have it down to zip code level. But this is an example of you know, using baseline assessment to assess the community using community specific health data. So again, now we're talking again secondary data that communities can use or programs or community-based programs can use and to see if you know how the

context is affecting the work that they're doing. There's a lot of sources to choose from. One type that I want to show you here, something that we have, we call it the MSUVI, which stands for Michigan Substance Use Vulnerability Index. It's a measure of vulnerability to adverse substance use outcomes within specific counties and now really specific zip codes. We're getting it down to that level in the, except in the more rural areas based on 8 indicators related to 3 components. You can see them on there, substance use burden, substance use resources, and then social vulnerability, which is an index that comes out of the CDC. And then we use this to direct our limited resources when we choose new sites and then assess our intermediate system level outcomes. You know, if we establish a quick response team, they seem to be, you know, fully functioning, then we start to see their SUVI index or SUVI score start to drop. You know, we can maybe at least assume that we are contributing to that. But that becomes then a type of, you know, evaluation that we can do again. But it's still a baseline assessment.

Another way, and this is a newer way, and we're just starting. We had a conversation yesterday during our workshop. We're just starting to, you know, wrap our hands around our arms around this. It's called the Racial Equity Lens Logic Model, developed by an evaluator named Keisha Brown, who I think operates mostly out of Arizona State University. It uses primary data, mostly interviews, to assess which social determinants of health, she called them social determinants of racial wealth inequities, might be influencing the effectiveness and efficiency of your program. So, these social determinants and their associated areas of racism and discrimination, so you can see how she hasn't divided out this way, are the drivers of inequities that lead to health disparities. So, using a logic model like this will highlight those drivers that are most problematic to the work that you're doing. And then the impact that you are or are not getting maybe might be because of this. So, the first thing you do is you do a social determinants of health assessment. And what we're doing is we're doing that with each of our participants in the Quick Response Team program to determine which of the social determinants are having the most adverse effects on our ability to help them. And these are then entered into the logic model under activities.
Then we create key performance indicators. So, from those assessment results, develop objectives that address the observed needs and then from the objectives create key performance indicators. So, what we're doing here with this, an example from the book that she has looking at economic stability in particular from our assessment, we say that there's poor credit scores. So, an objective would be to better understand how to budget money by admitting unnecessary expenses. And then your key performance indicator would be demonstrates the ability to create and follow a realistic budget. So that would be the simple way to do that and you would include that in your logic model to that's what makes this kind of cool. Something, it's using a tool that we're already familiar with. Then once we have been determined which drivers of inequity are having the most adverse influence, and we've developed objectives and KPIs (key performance indicators) that will keep us focused on those drivers, we can determine our desired outcomes. So, outcomes are finding from the KPIs, outcomes should represent significant impacts in the participants life, we're keeping at that level, that's why primary data is better.

They should be representing changes that are you know in in a SMARTIE format. You might be using that specific, measurable, attainable, realistic, time bound, inclusive, and equitable. And then these outcomes should be developed for each of the drivers of inequity that correlate with its services of programs. This really, really does help you focus on what needs to be focused on. Then, finally, having identified the most problematic drivers of inequity and their associated key performance indicators and desired outcomes, we try to identify key success factors necessary to maintain those KPIs and reach our outcomes. So, these key success factors state the important elements required for a program to maintain through KPIs and reach their outcomes. They're used to determine what inputs are necessary to add to the logic model. I find it fascinating because this is not really changing the program per SE, you know, not under activities, but you see it's under inputs. The key success factors are under the inputs. And here's the example is with economic stability, some ideas, some inputs that you could add are partnerships with local financial institutions, certified credit counselors, funders that may be interested in helping out. So really what this does, it really keys you into the need for partners. It it motivates you to look for more partners. They say that collaboration is a superpower. You know, I think that this process really brings program decision makers into that mindset where we really, really in order to deal with this problem, it can't just be us alone. And I really like how this logic model kind of helps with that.

And then one last tool that we can consider for conducting a baseline assessment of the community is called the Qualtrics Community Pulse. Now we have this teed up, we haven't applied it yet, we plan to. What it is, it's a ready to go solution built specifically for government agencies to quick to quickly assess communities where you have programs going, interventions going. It's all kind of pre validated. It's a set up to go. Your dashboards are set up to go. You can modify the questions as needed, but it helps you understand the experiences that the people in that community you're having, what drives your quality of life. And then you can make strategic decisions, as you move forward that will hopefully impact some way their quality of life, but then of course impacts the effectiveness and efficiency of the work that you are doing. So, we're really quite interested in this. So, we have these diversity, equity, inclusion and belonging ratings. You have overall rating individual ratings, ratings over time and I haven't really delved into it enough to be able to give you a good explanation about how these each, you know were derived, but I am assuming that they are validated and they are being used at this point to good success. And then there's key resident experience metrics as well; overall quality of life, satisfaction with public services, overall inclusion, satisfaction with community attributes, et cetera. So, you see it really kind of gives you a sense of what's happening in that community. So, we're pretty excited about that.

EK: We hope you enjoyed this episode of Leading Public Health, a podcast from the Region IV Public Health Training Center at Emory University. We value your feedback, so please take a minute to complete the evaluation located in the show notes. Thank you for joining us.

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