

CANS Tool, Latent Class Analysis (LCA), and Decision Support Model (DSM) Overview Webinar | [CDSS and the University of Kentucky's Center for Innovation in Population Health \(IPH\) CANS, LCA, and DSM Overview Webinar \(May 2024\)](#)

0:00

Okay. Alright Angie, now I will hand it over to you.

0:06

Morning everyone. Thanks for joining us this morning on the webinar and thank you to Dr. April Fernando and Dr. John Lions for being willing to come and present today. We really appreciate.

0:18

Your time and expertise in, going over the child and adolescent needs and strengths **CANS tool, the latent class analysis and the decision support model** that have been created to support us here in California as we move to our new permanent rate system. Next slide.

0:35

So that's what we'll be covering. We're going to start with an overview of the **CANS** itself and the history of the utilization of **CANS** in California. Sarah Rogers, our branch chief for the system of care branch will be talking about the history of that utilization in California. Then we're going to overview the latent class analysis and how the latent class analysis is being

0:57

Used in California and how that then fed into our decision support model, and then how the LCA and the decision support model have informed the development of our proposed tiered rate system.

1:10

Next slide. So this is just a visual of how these things sort of connect to one another. It's all part of person-centered design. We have the **CANS** assessment and the latent class analysis, which together lead to that decision support model.

1:30

Next slide. And we'll start with the **CANS** assessment and I'm going to turn it over to dr. Fernando.

1:37

To walk us through. Thank you so much, dr. Fernando.

1:43

Thank you. It's nice to be here. So the youth and families that come to our attention do so because their needs have outstripped their own ability to address them. Youth and families come to us at a point of vulnerability and how we engage them and provide them care actually matters. The main goal.

2:04

All of our engagement, particularly at the start, is to really understand youth and their family's story. We do this by listening, being curious, taking in the many perspectives on the youth and their family and their situation and coming to an agreement with the youth and the family on where they could benefit from health.

2:24

Help and how we can go about providing them the supports that they need. Gathering the youth and family's story matters.

2:33

If I could have the next slide, please. The **CANS is a way that we can capture the youth and family's story.**

2:42

And identify their needs and strengths to develop a plan that guides their care. This is done through **a collaborative, transparent, and a consensus building care process** that actually starts from assessment and goes to planning and then extends to exit from care. The **CANS** then is found.

3:02

Foundational in helping us understand what people need. And how best to provide supports to them.

3:09

Next slide, please. When used in the child and family team, the **CANS** becomes a really powerful way to lift up the voice of the youth and the family.

3:21

And helps the entire team speak a common language that can facilitate the teaming process as well as the coordination of care. And **within that CFT, the CANS can do what it really does best.**

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Organize, prioritize, and highlight people's strengths and needs and help to create an environment.

3:44

Where identifying supports and tracking change is a collaborative effort. It's about people and not about the **CANS**. And with that, I'm going to turn it over to Sarah.

4:00

Okay. We are in the same room as folks can see. Good morning, everyone. I wanted to just share with the group some of the history of the selection of **CANS** as our functional assessment tool. In 2017 and prior under the continue of care Reform act.

4:23

The department was required to identify functional assessment tool to support implementation.

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Of CCR and in through that project we partnered with CWDA.

4:37

And counties in order to evaluate two potential options that were considered. One was the something called the top treatment outcome protocol tool, and that was considered as well as the **CANS**. And we had pilots both of those tools.

4:57

With the partnership of counties and then following that. That time in 2017, we were or within that time in 2017, we were also simultaneously implementing the policy for child and family teaming. And so all of those things coincided, which was, you know, really

fortuitous in many respects because we were developing these policies around child and family teaming at the same time that were in.

5:22

Implementing the tools that are requiring that teaming process. And so it was an opportunity to really.

5:29

Make a decision for the future. We had an actual outcome study with the harder and associates, that we also partnered and had stakeholder engagement around. And then that report is available upon request.

5:45

In 2018, following that assessment and study, we did select the CANS and we chose the IP CANS, and DHCS also aligned with the CANS 50 to support the child welfare, the mental health screening component of, of our processes within the.

6:05

Context of a child and family team. So you can see the historical guidance that was released that related to those decisions, ACL 1684 and 2017 and 1809 and 2018.

6:19

And then in 2021 is when we release the guidance that required the CANS to be entered into the care system. And you can see that reflected in ACL 20 one-twenty seven and then through that work, we have now arrived at where we are today in terms of embedding.

6:39

The CANS tool as the underlying infrastructure for our rates proposal.

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And, you know, as a side note, just noting that we are also engaged very closely with Department of Healthcare Services to continue the alignment of the CANS both in terms of the tool itself, as well as the processes, timelines and really ensuring that we are moving toward an a more.

7:04

Integrated model for, between the child welfare system and our mental health system around how the CANS is conducted and even used.

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I think that's all and I'm going to now hand it over to John.

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John you're muted. Yeah. So as dr. Fernando had said, you know, the, the CANS is a container for the child and family story, a way to.

7:42

Capture it and communicate it. So, as we move increasingly towards using it for all sorts of decisions and particularly when you start using it for financial decisions, there's always going to be concern about the reliability and accuracy of any, any metrics that you're using for that purpose. So we're.

8:02

I'm quite intentional about reliability with the, with the CANS and so it really starts with the training where people have to train to a reliability of .70 or higher, the **average reliability in California is over .78, so it's really pretty robust.** And we monitor that reliability training quite carefully.

8:22

So there's been doesn't happen very often, but every now and then we catch people who are cheating and so we can identify that with their pattern of uses on the training website and, and address it with additional training. So cause we really want to create a culture in which learning to talk to each other accurately as accurately as possible about our.

8:42

Isn't families, is in fact a core value of that. Systems. So that's why we do the reliability training, that's why we do the recertification because we're want to make sure there's NO reliability drift is what it's called in science that over time you could develop habits. So that's why you re-check and people actually embed the CANS that work, the recertification is easy, people who are still struggling with it as.

9:06

As a part of their work, sometimes they have to redo the training. So, so that's reliability, but.

9:12

In terms of the actual field reliability and the and the key is actually is the most the highest field reliability of any measures the it's actually **one of the few metrics that their the field reliability has been established to be higher than the training reliability** because if you, if it matters, then people take it seriously. So.

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So consensus is a 2nd foundation of accuracy when it comes to something like the **CANS** cause, as you all know, that one person's perspective on a child and family story is one person's perspective and there could be differences, right? So.

9:48

You know, in my kid story of their school was always different than the school story of my kids, right? So you want to be able to bring people together and reach an agreement because that's actually a foundation of science that's called triangulation and science, but it's a it's a foundation of getting accurate information where you're putting it from multiple sources and.

10:08

Pulling it together. And then transparency is the piece that goes back to.

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Field reliability that if you use it, it becomes useful and then people take it seriously. So that's why I think **the state did a really nice job of getting people to just use the CANS 1st before you start tying it into decisions and financial models et cetera**, because the more different things you use a particular.

10:35

Communication strategy for, the more honest and robust it becomes. People trust it because it's just something that you use for everything, right? And so that's the basic concept. There's one child, one story that can't contain, it holds that, and so you want to make.

10:49

As many decisions as possible informed by that. So those are the three pillars of, of accuracy in the CANS. Go to the next slide.

10:59

So as Angie mentioned.

11:04

The CANS is the person, but if you want to actually, so the origin story of the latent class analysis is we were asked by the state to work with your stakeholders to create a placement decision support. So we did an inventory of all the placements, I think he had like 17 plus different placements.

11:25

I created a rather sophisticated model of saying, ok, these kind of kids would kind of.

11:34

Move into those kind of placements, but when dr. Fernando presented that to the statewide partners, people looked at it and said, Oh my god, you know, our, **our system is just about placements, right? It should be about kids, right? So how do we begin to rethink that? So that opened the door to a possibility of doing.**

11:54

Things differently. So persons that are designed is very, very common in industry as Apple has probably seen as one of the companies that's 1st innovated it, but really understanding who the.

12:07

People you're trying to help or sell to or whatever, what they, their characteristics so you can really design your.

12:14

Product or systems so that it's consistent with the actual needs, so. It hasn't been applied much in Child welfare. This is one of the very few, the 1st times it's going to be routinely applied in, in helping systems in the future because.

12:27

Everybody sees and all the other fields in which has been used that it's a useful way to think about the work. So **latent class analysis is a fairly common approach**, should say a machine learning approach is sort of a precursor of artificial intelligence, but it's not, it's not AI, but it's a, it's one of the methods in machine learning.

12:47

But, that you can use to begin to understand it. So, so it's the design component of this initiative. So.

12:57

If you think about how it works. So from any time you start looking at entire populations, you have to simplify things in important place, right? So, so one way you can simplify the **CANS** to make it more.

13:12

Robust and I think it's particularly relevant for, financial considerations. The distinction between a zero and one and a two or a three is notable. So most of you know the **CANS**, so you know that the zero the needs of NO evidence, three is dangerous or saving, but two is a.

13:32

Actionable so twos and threes are actionable for the strengths. Zeros and ones are a centerpiece are useful, so those are useful strengths and twos or threes are strengths that you need to build or identify and build. So, so that distinction is even more reliable than the four point distinction because there is more move and more stable too cause there's movement between threes and twos, for instance and zeros and ones.

13:55

Sometimes. Alright, so we took the **CANS** from everybody, and the way the way latent class works is, so let me kind of describe.

14:08

Get a little bit and passing. Maybe, maybe have the next slide as a background. So, if you think in two dimensions, right? So you have depression and suicide, say. So if you've got actual or not, then you basically have four dots, right? So you have four different locations, you could either be depressed or not, you could be suicide or not, right? So four different locations, you could locate a.

14:33

Every child in California and child welfare in one of those four locations. So let's add a.

14:40

3rd variable, let's say sleep, so now you've got. Actually we're not on sleep, so now you've got.

14:46

What eight? No 16 or 16 different locations in that space. Well, if you take that out to 63.

14:56

Different items, so if the camp is designed to be reliable at the item level so you can actually analyze the profile. So now you can't picture 63 dimensions, but it's basically an extension of that three-dimensional space where you had, you can identify a child on all their characteristics, whether they're actionable or not.

15:15

There's actually more locations in that space than there are people who have ever walked the face of the earth. There's an over a quarter million. There's only been a hundred and 9 billion people ever walked the face of the earth. There's over.

15:29

A quadrillion for just using the actual not actual across 63 dimensions. So.

15:35

Anyway, a lot of space, so a lot of uniqueness, you can, you can't say your.

15:42

You're not being, you're not leaving children to be unique. That being said, however, that is paralyzing if you're trying to do policy, right? Cause you don't, you can't do something that's different for absolutely everybody, you have to identify ways in which people are similar. So actually if you picture this 5063 dimensional space as a, cloud.

16:01

There are locations in that space, every child in a location, there are neighborhoods in that space. And **so what LCA does, it's a statistical procedure that allows you to identify**

groupings of kids who are more like each other than they're like other kids. So we apply that separately, the little kids and the school aged kids. And that's important.

16:21

Because those kinds of children are different, right? Little kids before school are really rather different. They have different seventies.

16:29

They have a different way of organizing their needs in terms of patterns of those needs than school age.

16:35

Okay, so we did that. We and **what we discovered is that there were four different neighborhoods, if you will, within the zero to five and seven different neighborhoods within the 6th plus.** There's a large number of.

16:51

Ways that you can work to identify how many classes is the right number. We did a variety of different strategies and kept converging back to this. Just so you all know, we've replicated this basic structure now in three, two other child welfare systems.

17:11

On the east coast in the middle and California, so very different states, same structure of the of the kids. So the kids are more similar than the systems perhaps. Anyway. So we're pretty sure that this is a fairly robust.

17:25

Way of thinking about how kids are more similar to each other than they are like other people.

17:31

All right. So then, so let's have the next slide. So you can take this cloud, they're in 63 dimensions or whatever, and you can project it onto two dimensions, right? So that's what this is. So it's not a perfect prediction because you can't picture it.

17:47

But it gives you an opportunity to picture. Kids, now the reason why this is a little fuzzier than the one you'll see for the.

17:56

Older kids is there's actually three dimensions for, for little kids that are pretty.

18:04

Important and there's only two dimensions needs and strengths for the older kids. So we really should put this as a three dimensional slide and it'll, you'll see the separation a lot more clearly because that's that 3rd.

18:17

Development, characteristics. So anyway, what we found **for the little kids is four distinct groups.**

18:25

There was one group that was **the largest group. Of kids doing well.** So by that we mean that these are kids that are mostly zeros and everything. They don't have needs and they have pretty robust strengths.

18:36

There's **another group** of kids that **don't really have needs, but they don't have strengths.** That's a different kind of.

18:43

Challenge, right? Cause that those kids you probably want to think about and intentional identification building strengths. You have a **3rd group** that their **average age was zero, and they had a lot of, exposure.**

18:59

Characteristics of service exposure, prior to birth and need near prenatal care issues and so forth. And though those were characterized as high risk infants. And then there's a **4th class** that had just **a whole lot of needs**, all sorts of stuff. And those are the complex kids.

19:17

Keep in mind with this kind of two dimensional projection, the size of the area is not a representation of how many kids there are is how homogeneous that group is. So they're doing well it's pretty homogeneous. The complex is not homogeneous at all.

19:34

Alright, go to the next slide. Here's the **same thing with the older kids**. You'll notice that a needs versus strengths basically is what this particular two dimensional projection ends up being. It's way cleaner because there's not that 3rd dimension that's so powerful that it is with the little kids.

19:54

So and you see there's actually these **seven dimensions**, so **on the bottom, most are kids that actually don't have a lot of needs**. That's why they're on the bottom of the.

20:02

I don't know what that is. It looks sort of like a dissolving pop dart to me, but anyway, so the doing well is.

20:10

It's actually the biggest group, but it's the smallest space because it's pretty homogeneous. These are kids that are mostly hovering right around zero. **There's a moderate level of strengths** and **then there's this NO strength group**, which is actually about 10 % of your population of school aged kids that they don't have a lot of needs.

20:30

But they have NO strengths, so that's an important group to think about from a. I mean we call it prevention, but that's kind of a misleading concept because prevention is sort of an odd concept of let's do stuff to make sure nothing happens. That's not really what goes on. It's not really how you're successful with the kids. **What you're really trying to do is build resiliency so that they can withstand when things happen, they will just be ok.**

20:54

And that's really about strength of building. So the NO strength children are at jeopardy of ending up hiding children, if bad things happen.

21:04

Then there's these **four trauma groups**, so there's a **mild group** that's characterized by depression and anxiety, but they don't have a, they're not really very dangerous. They're, you just, they just need kind of kind of basic trauma informed care.

21:18

And there's these **two internalizing externalizing that are kind of more of the mid range**. Internal externalizing have more strengths, which is interesting than the internalizing. And then there's the **severe trauma group** that we call it, which is really that all the above. It's a lot like the complex group that we have identified in.

21:38

The little kits. So that's the, those are the two. Two visualizations of the results of the LCA. Go to the next slide.

21:49

So now the LCA locates kids that are related to each other and their distance based on all 63 characteristics. So you could actually create.

22:04

A decision model that said a future child would be in which of those seven classes?

22:11

We don't think that's a good idea because it's not really person centered. It's a design LCA is a design component, and you can't have.

22:21

AI until you have HI. So in other words, you really shouldn't be doing.

22:28

Machine decisions support until you have the human intelligence to be able to model that and do it better. So we think that's premature, so you have to use more of a.

22:41

Clinically driven way of grouping the kids consistent with the LCA but understandable from an English language perspective rather than a bunch of.

22:51

Numbers and coefficients that you're adding up and it creates something up too so that nobody understands what that on earth you're actually doing. So that's what the decision support model is really about and that's what makes the **person centered design** person centered is moving forward, you can actually make decisions based on understanding person. You're using the.

23:11

CA to inform the decision model but not to be the decision model. On the next slide.

23:21

This I think is you April, so I'm going to turn it back over to dr. Fernando.

23:28

Yeah, so the decision support models, as John said. Are really to make sure that we are helping people who are making decisions do so with using the person centered information in this case specifically from the **CANS**. And, and as, dr. Lions already mentioned, the late in class.

23:52

This provides the structure, but the decision support model helps us understand which children and why they are placed in the different classes. If we can have the next slide, please. So what you're going to see here is a map, and this is by NO means a political map, but it's the blue, the dark.

24:12

Blue states, identify the states that are using the **CANS**.

24:18

Statewide. So either in one sector like child welfare, sometimes in two, like child welfare and in behavioral health, like in California. The green states represents states where there is some usage of the **CANS** either at the organizational or at the.

24:38

A County level. If you turn your attention to the stars now, you will see there are yellow stars and stars that have, that are outlined in white, and some states have both. So the yellow stars represent decision support models that are active. Some of them have been active for a very long time.

25:00

Time, 15 or more years. Some of them are fairly new. And then the stars that are in outlined are where we are developing or revising models, and you can see that the stars that have, the states that have both are where we've got models in play, but we're also either creating new ones or.

25:20

Revising the models to. Incorporating new information. So you can see that the models have been in place for some time around the country. Can you have the next slide, please?

25:35

This is just a recap of what John already mentioned that.

25:42

When we have the structure, understanding, how children look in California in the child welfare system, we can now, we now need to figure out how can we describe them from.

25:57

Their characteristics, and this is where the **CANS** comes into play and where the decision support model can be helpful. So the decision support model doesn't only describe the children, in the different groups or classes, but it also helps us place children newly entering the system.

26:17

Into the right class or group, so that, because we, again, as John said, we don't want to rerun the LCA because we already understand the structure, in a pretty robust manner. So **John is going to walk through the decision support model with you now.**

26:38

Alright, I'll go to the next slide. So here's just an **example of how it works**, so you start out with kids are doing well, so you say everybody's doing well unless otherwise specified.

26:53

And then you start building from there, so to be the low strengths is you don't have any needs, alright so that's 2.1.

27:02

You basically don't have needs. And, NO, yeah, maybe one, right? And that you do have.

27:09

Some strengths, but not all strengths. That's how that's designed. So in other words, to be in the low strength.

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Group, you want to have minimal needs. And have moderate extracts.

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Over the next slide. So.

27:30

The, newborn high risk is, you know, you need to be a newborn, right? So, and then you have an exposure cause that was a, like a 95 % in the class or 100 %, right? Cause it's a statistical model, not a clinical model. Medical trauma, and then these kind of characteristics that are common, so three point.

27:50

More, at least three or more ratings of different kind of functional impairments so that there's a reason interview. So you have these characteristics that put the child at risk and then you have 3.4 that says and in fact that risk has manifests itself in this level of need.

28:08

Cause you do have kids who do have that level of rest that don't end up generating.

28:14

That level of need. And then, ok, so for the complex kids is that this is just the definition of complexity.

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So if you don't qualify for three or four of you, you fall back to the group one. So.

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That's how the decisions for his model is designed for.

28:32

The little ones, go on the next slide for the older kids. So, same basic concept, you know, you, you don't have knees.

28:45

But you do have strengths, that's character, that's that'll be doing well.

28:52

2nd level, if I go to the next slide, you, for level for the 2nd class, this is the moderate risk, you don't have needs, but you do have.

29:05

I, you do have some strengths but not all strengths. And then for the low strength, the strength identification platform, the kids here basically knows you just basically don't have strengths, right? You don't have needs, but you don't have strengths.

29:19

And then, next slide. Same basic logic, but now we're talking we're into the trauma pathway, so the 1st level is there needs to be a trauma history, and then there's got to be, you know, there's some implication of that you're beginning to be concerned about a behavioral health or presentation of some type.

29:43

We're pretty broad here because we know that kids, express their traumatic experiences in all sorts of different ways, and so you want to be open to be able to capture all those kids and get them the help they need.

29:57

The 5th is a little bit more comprehensive, so this is, and this actually combines the internalizing and externalizing classes into a single class because of parallel levels of needs.

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Little bit different levels of strengths, so, and then.

30:17

The one next line, the last this is the severe trauma group. You can see they have a lot more going on. They have trauma experiences, but they have, you know, significant level of behavioral health and significant level of risk and et cetera, so.

30:36

You might notice 6.3 versus 6.4 us, the runaway and intentional misbehavior are.

30:47

Risk escalators, they're not risks of the risk escalators, they make other risks even riskier, so that's why that's there.

30:54

Alright, so that gives you a sense of what the decision support models look like.

31:00

So I'll turn it back over to. I think it's Sarah, but maybe Angie.

31:12

Hi, we're both here. Perfect. So here is the kind of pathway and the timeline by which we have been working to establish the decision support model. You can see that in kind of mid 2022, we began conducting the testing.

31:32

In partnership with IPH on the initial version. The, the latest in class, I'm sorry I'm trying to get to the.

31:42

There we go. And, and that is, you know, we had been working with IPH prior to that in the development of it. And so then we were testing it in July through October. In the November of 2022, we started to have the conversation that John alluded to around wanting to focus not.

32:02

Just on the placement type, but really have a way to discern the actual needs of the child and the strengths of the child. And that was really in response to the extensive amount of feedback we received from the community and the workgroups around wanting a system that was enabling children to.

32:22

To have resources regardless of their placement setting and to really build a system that enabled children to, to have that, that level of support in whatever location or residents that they happen to be in with a grandmother, a relative family. And so at our request, IPH began.

32:42

To reformulate the decision support model to focus on those in needs and strengths and the level of care instead of just the placement type.

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And so that's the description of exactly what that entailed that you all you just heard. In January through September of 2023, the department with IPH also began then testing the reformulated DSM with social worker interviews and expert panels and caregiver surveys and those.

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These activities were conducted in partnership with counties and CWTA, and really wanting to be accountable to the perceptions of the validity and the consistency of the decision support with those involved in the case of the child and how, whether they felt that it was.

33:30

As consistent with their perceptions. And so that was intended to, to really do that, that, that kind of.

33:38

Building the consensus with those who are on the ground and their experience in utilizing the decision support model.

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We also in May of 2023, began distributing the latent class analysis to counties upon their requests and also worked with some counties and how they could understand and use that decision, the latent class analysis, and that work will be ongoing.

34:05

As soon as we have the green light to continue that, but I think that work is also intended to not only support the understanding of the decision support model, but just all the different ways that a latent class and the CANS data can inform how we're doing capacity building and how we're ensuring that we're truly responding.

34:25

To the identified needs of a child. And then in June of 2024, we are finalizing that last report regarding that analysis of the data collected in that three part study. So that is the, the overall timeline, a high level timeline of our work with IPHR on the decision support model, and I am.

34:47

Now handing it over to you. Sarah and I are switching places in my office.

34:56

So, back to our visual and. Hopefully this was a helpful explanation of sort of the history of the selection of CANS, what the CANS does.

35:06

How we used all of that data through a latent class analysis in order to understand sort of groupings of young people into the neighborhoods that dr. Lions was describing and then developed a decision support model that allows us to understand a child's level of needs and level of strengths so that we could appropriately.

35:26

We support that level of needs and strengths and that's exactly how we're using our decision support model within the proposed rate structure. So next slide you should all be very familiar with this. This is a visual that we've shared many times over the last many months as we've been discussing the proposed rate structure. **So what we have done is created the three tier.**

35:48

And what was interesting is in the conversations that we were all having in 2022.

35:54

There was a lot of folks saying, we have too many levels of care. LOC four levels plus ISFC and then the highest acuity of kids have to be within STRTPs. It's too much. It doesn't work

because you can only meet the highest level of acuity when kids are placed in the STRTP placements, and it's also not working for the kids within LOC.

36:14

1234 four, that's too many, and then ISFC. And there was a general like sort of gut feeling that the appropriate number of tiers is three, that there are generally kids that are sort of at the basic level where, and that's exactly what the data has found. That's exactly what our latent class analysis has found and what we find in the creation of the.

36:34

The Vision of support model is that we've got children that have varying levels of strengths, but they don't have those identified needs and they can be grouped together.

36:43

Within **tier one**, and then we have kids that have, are on that trauma pathway that Dr. Lions was describing and have that more intensive and intermediate level of needs, which is the youth that we've put within **tier two**. And then we've got the zero to five year olds that are sort of that high risk group of the complex care intense in the.

37:03

Youth that are complex care, youth that are ages six and older. And that's really the kids that are within **tier three**. And what I think is interesting is it was sort of intuitive that folks said we should really have three tiers and the data very much supported that when we went and looked at the data and we broke it down and we did the significant amount of analysis that we did through the latent class analysis and using this decision support.

37:27

Model in order to sort of group kids together according to those that have varying levels of strengths but NO needs, those that have intermediate levels of needs and those that have the highest acuity of needs, that's exactly what we found. And then we've put that within our proposed rate structure and attached different levels of support based.

37:47

On that understanding. So the tier one kids do not have the immediate needs funding because they don't have those needs identified, but they do have support for care and supervision that's higher than that's akin to LOC four, so sort of bumping all families up to that bias level for LOC four and all of those young people would.

38:07

Receive the strength building dollars because we know all of the kids in tier one have a need for maintaining strengths that have been identified and building additional strengths. And then within tier two, those two things continue so that we're continuing to focus on strength building and strength maintenance, and in addition, identifying the supports needed for addressing the.

38:27

These needs that have been identified and then within tier three making sure that there's additional support needed in order to address those high-level needs that are identified within care kids in that system. So next slide.

38:40

Interposing these things together, you can see, sort of.

38:46

What dr. Lions described as the young people that are the zero to five year olds that are in latent class one and two, those are our young people's zero to five that are doing well or that have low strengths but NO identified needs. Those are youth that fall within latent classes one and two and that would fall within tier one of our.

39:06

Proposed rate structure. Next slide.

39:12

Continuing on with the zero to five year olds, those newborn children with high risks are latent class three, which corresponds with the children that are within tier two within our system.

39:25

And next slide. And then we have the complex needs zero to five year olds, who are the young people that have that highest acuity of needs and so those are within tier three for zero to five year olds. There's been some conversation about like why break out the zero to five year olds from the s the population of kids that are.

39:45

Fix and older, but we really saw from the analysis that was done the need to sort of differentiate between the two groups, particularly at this level of youth that have the highest acuity of needs sort of recognizing sort of what kinds of supports are we going to need for these zero to five year olds, and they look fundamentally different than the young people that are.

40:05

Falling within tier three plus for the 6th and older population, and so as a policy decision, that's why that distinction is made there. Next slide.

40:14

And then going to our 6th and older population, tier one captures those kids that are doing well, that have some strengths, but not all of the identified strengths as dr. Lions described as well as those kids that have a need for strength building. They don't have identified strengths, but they still don't have it.

40:37

The identified immediate needs either. And so all of those young people are also within those 1st three latent classes that we have grouped into tier one.

40:48

Next slide. And then we have our trauma informed pathway. These are the kids that have the trauma informed treatment and the comprehensive support needs. And so those are the young people that are grouped together within tier two. And then we have next slide, our kids with the highest level of acuity of needs.

41:08

Which are the kids that have the need for the intensive supports and the specialized supports, those kids within latent classes, six A and six B And those are the young people that are grouped within tier three plus. And so.

41:22

And this is very **data informed way of sort of understanding needs and strengths**. I did see a **question in the chat that was asking has a decision support model ever been used to determine rates?** And we would say what we're using our decision support model to do is to understand needs and strengths. That's what we're doing. And then as a policy.

41:42

Decision, we are saying what level of funding for care and supervision for strength building and to address those immediate needs that have been identified. Do can we.

41:52

You know, provide in order to address those varying levels of strengths and varying levels of needs in a way that sort of makes sense from a rate's perspective, right? So that you don't have 15 different rate categories so that you have the ability to sort of group young people together, but that it's coherent and that it's really understanding.

42:12

And based on a real understanding of the young people that have strengths at varying levels and intensive needs and the highest acuity of needs, and so that's how we've used this decision support model in order to sort of create different levels of support for kids based on those varying levels of needs and strengths.

42:31

Next slide. Sarah, anything you would add?

42:38

No, I think it's great. These are resources available to you. I think we've mentioned a couple of times in this presentation that there's also a report that will be published on the decision support model that we're using in the latent class analysis and I think that's coming sometime in June, so we're working on that, which is another question I see in the chat. And then I think.

42:58

We have time to open it up for a few questions and. Emily I wasn't monitoring the chat much, so I'm not sure if there were additional questions in the chat.

43:08

Yeah, there are a few. Let me find a couple. I do see one that says will you share this presentation. So this is being recorded. We'll get that posted to the CDSS foster care rate reform website. Thanks Daniel for reinserting that link into the chat, and we can also share these slides out afterwards with folks that attended.

43:27

Okay, and Marla asked **how often will the LCA be updated and how will evolution of the LCA over time impact the rate schedule?**

43:46

Yeah, dr. Lions or dr. Fernando, do you want to answer that one for how often you're sort of updating latent class analysis?

43:54

Yeah, it sort of depends on what you, what you mean by updating it. I think there's how all these things work is you wanna continue to confirm that the structure of how we're understanding how kids are similar to each other or different. You need to kind of make sure that's not drifting in some important ways. For instance.

44:14

What's oftentimes the case is as your threshold for. Taking kids into, the system changes, the, the population of kids that you're serving in the system changes. And so you do have to be attuned to that kind of variation to make sure, it, it needs to keep it current. Whether that's.

44:37

Updating the LCA or not. I'm not sure if that's the language I would take. I was just confirming that the, that this structure is still a.

44:46

Valid way of, of understanding the kids. So I think the other thing you always are doing is monitoring the decision support model to see whether or not.

44:56

You know, it's there's anybody that's, it's not performing appropriately for and that's that never ends, right? Because you always want to be keeping your eyes open on that and that's just an ongoing quality assurance thing That'll be a standard part of how this stuff works.

45:13

And the only thing I would add, I mean it's somewhat related is just how important **fidelity** to can's practice is, you know, with respect to the overall validity of this process. And so we really, you know, are acknowledging how essential it is for us to have a strong investment in.

45:34

In in that fidelity to the beginning of John's presentation around what is can't supposed to kind of be and how it's supposed to be conducted.

45:45

That's a, that's an important component that we would be tracking and monitoring and engaging around.

45:54

Okay. All righty. Marla asked, **how will the decision support model be applied to a child? Will it be built into cares?**

46:06

Oh, yeah. Ultimately this is going to be built into cares and so the **CANS** data will be entered and then that will be applied, the decision support model will be applied through the cares system.

46:30

Okay, I'm seeing a question. **Are all counties using the same standardized version of the CANS? Are there any variances?**

46:43

We are aware that there are counties that may have added components and there's, there is, and I think April and John, you're probably even more familiar with exactly what that variation may look like county to county. What we are doing is working with GHCS closely to align, as I mentioned before.

47:02

More as far as the required components, but there are some counties that may have additional pieces that, you know, difficult additional components they've added and April looked like you were maybe going to speak to that.

47:14

Yeah, you're correct Sarah. There are, other count, the county have other versions of the tool. They're probably named after their county. We made sure that when we were working with those counties to develop or to customize those versions that the.

47:33

All the items in the IP CANS were there and that all the items in the 50, the core 50 that DHCS uses were there as well. So they have more, not less.

47:46

So I think that that actually speaks to a, a issue that sometimes leads to misunderstanding because if you are trained.

47:55

Like I was as a psychometrician, then whether you add or subtract items changes the tool in some way, that's true in psychometric theory because all of your measures are evaluated based on the interitem correlation matrix. So we just a paper recently published saying, well, you know, depression.

48:15

Is more correlated with suicide than it is with conduct so therefore the kind is not valid.

48:20

So the CANS does not base its decisions about what items to include based on the interitem correlation matrix. It actually based on the meaning. So the CANS is more like an app car. So in other words, each of the individual items standalone. And so if someone as you have those items in any version.

48:40

It's the same item and it functions as the same item. So you have the 50 in every county.

48:48

You might have the 50 plus in some counties, but you don't think of it, oh wait, that's a different measure, that's.

48:54

That's just thinking about it from the wrong frame. You're thinking about it from a traditional measurement frame of which it's not. It's like saying, well, I only use these words and I want to also add these words to my sentences and therefore it changes those words now not really.

49:08

So words or words, and so and they mean the same thing even if you add adjectives, right? So.

49:15

That's it. I mean such a different way of thinking about stuff. I didn't, you know, if you want to read about giving a metrics and what that all means, there's a number of different resources that are available. There's some stuff on the YouTube channel that you can look at, but it's, it's just a different way of thinking about.

49:31

Things, so. Thank you. All right. **Which version of the CANS will determine the rates?**

49:43

The 1st child welfare CANS, the 1st behavioral health CANS, and will subsequent CANS change the rates.

49:50

So, yeah, go ahead. Do you want to take it? Yeah, it's the. **The 1st CANS will determine their tier upon entry into the system, and that has to happen within the 1st 60 days that a child is in care.** So pending the completion of the CANS, the proposed rate structure proposes that youth would start at a level of funding equivalent to the care and supervision component of tier two.

50:14

And then once the CANS is complete, they would go into the tier, identified by the CANS, which would happen within the 1st 60 days, and then there'll be guidance that's being created.

50:23

About, how often the CANS has to be redone. Right now it's every six months and how when it could be done more frequently within that six month period and then how that would inform like if the CANS score that's done and new, it says the child has moved up or down a tier, **what is.**

50:43

The process by which we would move the child up and down into the corresponding tier. What we've said is we want to.

50:51

Titrate down slowly for kids that are in family placements because we don't want to destabilize those placements and you'd want to titrate up quickly in order to make sure that kids have the appropriate support that they need, again, in order to stabilize and support those placements.

51:06

And the only thing I do want to make clear is that for those counties in which the behavioral health system or partner is the primary entity that is doing the CANS, that we are aware of that, that is not intended to be requiring anyone to do another CANS or anything of that nature, and so they.

51:25

That is part of the purpose of the very clear alignment with healthcare services to ensure that.

51:31

All of our systems are getting the same guidance and have the same curiosity and that that alignment is present.

51:40

Thank you. Alright, we only have a few minutes left, so I think that this will be our last question. It says the original CANS analysis was of 60,662 CANS up to January of 2023. This does not include probation nor did it include CANS done, the behavioral health and not recorded in cares CANS.

52:08

Okay, sorry, I was looking at another thing in the check. Can you repeat that? I apologize. I'm. I'm sorry. Oh NO need to apologize, let me apologies if I scrolled down, let me.

52:19

Here we go. The original CANS analysis was of 60,662 CANS up to January of 2023. This did not include probation nor did include CANS done by behavioral health but not recorded in CARES CANS. Are you going to rerun it?

52:34

Yeah, the more data, the better. What you don't want to do though is include kids to just have a behavioral candid not are not in the job offer system, so, so that.

52:45

It's really important with LCA that you pay attention to to the denominator because you're really describing the population. So if you start combining populations, it creates a different sort of set of considerations and the implications are going to be different. So, the, the plan is to.

53:05

To update with new data, I think there'll be there's, I think there's been far greater participation of counties in the placing data into cares over the over time. And so the I think the data will be even more robust, but yeah, you just need to go and replicate it with new data that is.

53:25

And before this summer I believe is the agenda, so we're.

53:31

Late spring? I don't know. Is this summer or spring? I don't know what it is. I'm not thinking of that summer, but.

53:36

hotter than heck here, so, was that, does that address your question?

53:46

Is it, is that on point to what that question is? I mean the only thing that we were thinking we have talked about.

53:55

You know, the anticipated impact of that and you know, I think you and Olga and others have implied, have indicated that in your experience, you know, adding these other populations.

54:08

May have some refinement to the LCA but not in such a manner that it's likely to substantially.

54:15

Change and so it might be helpful to speak to, you know, in your, in your broad experience, what you would anticipate the kinds of, of refinement.

54:25

I think the big refinement I don't think it's going to have much of an impact on the strength pathway.

54:32

I think more data will provide some greater clear clarity within the severe trauma group because that's a, if you look at the, the visualization of that, that's actually the biggest.

54:45

Region, that's the most space covered, which means there's a lot of variability within that by a child. They're all very, very complex and so it makes sense that they're your.

54:55

A top tier, but probably within that there's kind of different.

55:00

Not necessarily different intensity of need, but maybe different practice approach that is important to understand. So I think the clarifications will really be in the practice approach kind of space rather than the overall intensity because I think the overall intensity is pretty robust and since we've seen the same thing.

55:20

Thing and, two other big states with few data sets. I'm pretty confident that it's not going to be.

55:27

Something different in terms of the basic structure, but I do think that severe class, which is very diverse, but very severe, probably can be understood from a practice perspective with a little bit more nuance.

55:43

And that speaks a little bit to like the design of our rates proposal generally that like it's not based, we didn't design the decisions. We did not ask for a decision support model that leads to a placement because we think the placement itself is not the thing that can have the level of variability in order to really individual.

56:02

Lies and meet a child's needs. And so we can correctly identify the kids with the most complex needs based on the tools that we're utilizing here and the data. And then at that level I think as dr. Lions is saying, within the most complexity, there could be a lot of variability in how you address those needs. So having a decision support model.

56:22

That helps us understand that variability and a rate system that's designed to meet variability. So having immediate needs funding that's not tied to a placement but tied to a child allows us to make sure that we're individualizing how those dollars are used to meet that child's individual needs. And so by design, we have.

56:42

Try to **create a system that is very individualized** so that those strength building dollars are attached to the child and the immediate needs dollars are attached to the child to allow for that individualization that we know is necessary because what this model tells us is the neighborhoods of the kids. It tells us sort of generally kids that have different levels of.

57:02

Strengths where they have those intermediate and moderate levels of needs and where they have high acuity of needs. And the CANS data itself for that particular child can give a lot of insight about what that individual child needs, and we want do both. We want a rate system that sort of attaches a level of funding and support to the child that allows us to do those sort of broad.

57:22

Groupings, and we want that individualization. So we didn't want something that's shoved kids into different placements. We wanted something that allowed us to customize a level of support to that child based on sort of broad dollar amounts, right? We can't provide an individualized level of funding for each individual child. That's not how foster care rates work.

57:42

But we can provide flexibility in terms of how those dollars are used in order to really meet that child's needs. And that is really the vision of the model. Yep.

57:55

Well, thank you so much. We are a little bit over, so I do want to acknowledge that, but thank you so much, Dr. Lions and Dr. Fernando.

58:03

And Angie and Sarah for a very helpful overview. As we noted earlier, this is being recorded, so we will get this posted to the DFS foster care rate reform.

58:16

Website probably in the next week or so. All right. Thank you so much. I hope everyone has a great rest of your day.

58:22

Right thank you everybody.