

**Panelists:**

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*Please note: The following is a direct transcription and has not been edited.*

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Jennifer Noyes: Good morning everyone. My name is Jennifer Noyes. I'm from the University of Wisconsin-Madison with the Institute for Research on Poverty. And hopefully this is the panel that you are at they are using integrated data to support program management evaluation and research. With me today is Maria Cancian, she is a professor of public policy and social work at UW Madison as well an affiliate of the Institute for Research on Poverty. You're getting two for the price of four. So we modified our presentation to incorporate all the information that was to be covered. So you'll get all the information by two of our co-presenters who were unable to successfully switch their flights to get here. So before I began I'm supposed to read this, little reminder that we were just all reminded about in the opening session.

But, as a reminder the audio for this session will be digitally recorded and once formatted for accessibility standards will be made available through the summit website in lieu of written consent participants who ask questions or provide comments during the session will be giving their permission or consent to this recording, clearly a bunch of researchers, wrote this. If you have any questions about this recording, please feel free to talk to one of the summit support staff. Okay. That to remind you, because it is being recorded, this is a small group and we think we're going to have a lot of, want to encourage lot of conversation and try to use the mike. If you have a question or comment or you want to get involved in the conversation. I'm not sure how realistic that's going to be. If we actually start just talking, but we'll do our best, because they are out there recording this right now. So with that, any questions or concerns before we get started any housing keeping?

Okay. What we're going to do is divide this in half. I'm going to start and provide an overview of our data background and situation in Wisconsin then from some research that we do and then Maria is going to provide several different examples of how we have used that data to inform policy and practice. So I'm going to spend about 15 minutes with some more technical stuff. I'm not a technical data person I facilitate what we call our data core. Maria and I some of this knowledge is very interchangeable. So if there is questions, she might be answering them, I might be answering them and then the project that she is going to talk about we've also worked on a lot together. So, we might get into this dialog back and forth as well.

We want to be as informative as possible in seeing how this is the first session of the morning and now the first session of the whole conference just too kind of get the

conversation started. So as I said, I'm going to talk about what we call the Wisconsin administrative data core. And before I do, I want to offer a couple of acknowledgements, this work has been funded in particular with a grant that we receive from ACF very particularly focused on building an integrated data system. It was actually a grant that was focused on integrating services for TANF eligible families. But, we used the grant to bring in all of the child welfare information and to some ongoing work that we already had underway. We very much need to thank the State of Wisconsin for their administrative data and giving us access to it.

This is a very collaborative relationship that I'm going to talk about. This is not a university standalone activity that we have going on. Obviously, our research and programming staff at IRP and then I listed some of the key collaborators Maria is one, Pat Brown is another, and Eunhee Han is a graduate student. What I want to cover is sort of the context of all this data that we are going to be talking about that we use. The way the system is established it's a little bit, will be a little bit technical but not too technical and then some of our key lessons that might be of interest to you, if this is a type of thing that you want to go forward with. So first just a little bit of background, so you know who we are and where we come from. The Institute for Research on Poverty was created in 1966 during the war on poverty has been going, ongoing since with a real strong academic research base. But, we have a very applied, sort of research activities and concert with our state partners and also with our federal partners.

We get our funding from the Federal Government, but we also do a lot of research projects with grants and contracts either through foundations or with state and federal agencies. Generally our organization, we have a set, a set of staff researchers, but large majority of our work is done through some faculty, affiliates. We have about 60 on-campus; 70 off-campus that do a lot of their work. We do have specialized programmers, who have a strong understanding of the administrative databases that we use, which is really important to build what we've built. So, this data core that we're going to talk about, it really reflects an evolution of a lot of large scale evaluation prices that were undertaken at IRP. The grant that I talked about that we received from ACF was sort of icing on the cake of many, many years over a decade working with administrative data from the state. So, although that was really, really important like glue to pull it out together without all the history behind it. We couldn't have built what we built. Just we organizationally, we just have a lot of different parts to this.

So this is what I referred to before. We have this very collaborative relationship with Wisconsin state agencies and we come to use this diagram to show how it's very iterative, it's not as if someone down at the university dreams up a question that they want to go answer and try serving off an answer without putting in the context of what really matters to the policymakers and the practitioners. And it's not as if the policymakers and practitioners just come up with some kind of a question and just ask us to answer it without having this big conversation what that really means. I think a lot of you, who do research or whatever side of the coin you're on here, there can be a lot of miscommunication in terms of words and a researcher might find that they are answering a question that they think is really fascinating, interesting, but as absolutely nothing to do

with the real world on which policymakers are operating or that practitioners actually have to hit the ground and get the work done. So what we bring is we have university resources that we can bring into this, lot of technical expertise and a longer term horizon to be able to do research. That doesn't mean we can't answer a question that someone might have that's the media importance, but if it's a long term evaluation question we know we're going to be around to be able to answer it.

On the state agencies obviously have all the real world experience come from time-to-time can bring funding not often, but can definitely service a vehicle to work to get grants and actually as I said as the real world experience to make the research that we do relevant. So I now actually talk about the data system that we have, its built off of the fact that we have these specialized programming staff, each of them have expertise in a particular data system that the state has. We also have for those of you who work in a university said, we have dedicated staff people who really worry about the human subjects protocols, in terms of making sure that we are following all those requirements much like reading this piece of paper that you just gave your consent to be recorded.

As I said we have core faculty and staff researchers. We have a lot of graduate student trainees who are able to use the data that we've developed, to develop their dissertations and then in turn those dissertations actually are informing policy and practice for the state. So it's a win-win for everyone. And then we have some specialized hardware, software and technical support from this cluster, the static cluster. So here is all the data that we pulled into our data core. We, and each of the, in the parenthesis are the names that Wisconsin has for the system. So we have a type of AFCD actually, its old AFDC and TANF data, which in our care sys, what we call a care system, we have child support data and what's called our kid system, we have SNAP and food stamp, SNAP forming those food stamps data, Medicaid and in our state we have a program called Badger Care, which is, needs Medicaid basically.

Unemployment insurance benefits, child care subsidy information, child protective services information in SACWIS, which is of obviously of interest to you. We have just recently been able to pull corrections in. So that is the core of our data. We can do regular matches to unemployment insurance wage records. We can do specialized matches from time-to-time with the Department of Revenue, but that data is very difficult to get. We have other records SSI records, we have vital records. We go out and we collect information from court filings. So that's not electronic that has to, we have to go out and actually look at the information of the files and then we have a series of projects that have looked at the TANF application process. TANF, the temporary assistance for needy families for those of you who are less familiar with that, we placed welfare. Those are not electronic as well, we had to go out and look at those are 2000, three cohorts of 2000 case files that we've looked at that we put into the system.

So and this is how it works. Our old model, we would take a sample, let's say we were interested in people participating in child welfare, people participating in TANF. This particular diagram is a sample of TANF individual, so temporary assistance needy family individuals; say we had a sample of 5000 people or 500 people and we go and match to

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each of these systems. We got matched the child welfare, matched the UI wage, matched to child support on a sample-by-sample basis. What we can do now, is we have the entire population of anybody who was on TANF SNAP, formerly known as food stamps, child care, medical systems, SSI also now all of the SACWIS information, which is all the child welfare information, other reports into the child welfare system and out of home placements.

All of the state incarceration data and all of the information related to child support, which would include child support payments, receipts, paternity establishment, divorce. We have all that information. We don't have all of the UI wage record information, because that would be everybody. But, we can still go out and do a match against those populations that we do have in the colored in parts of the diagram. So it's a big shift and how we're able to use our data. And what we have done is we've created what we call a multi-sample person filer, the MSPF and basically the structure that's in there is one record per individual without distinction between adults or children. So if you were a child for example that appeared in the child welfare data, you will be in there as a child and your mom or dad will be in there as separate as you know mom or dad.

It's been obviously very complex and time consuming to program to pull this together across all of the systems. We have done a lot of different things in order to do this, so to pull from all of the primary data looking at things that are commonly recorded like name or sex uniquely identifying information like social security numbers or things that we consider to be immutable like usually the date of birth or the place of birth doesn't necessarily change. Our filer right now is almost five million individuals in it. And the one thing I wanted to note is that this file is designed for research purposes. There was a lot of matching going on there was probabilistic matching. And so while its good enough for research, it's not good enough for example for an administrator to go in and say, oh look we see that Jennifer Noyes is in five different food stamp cases. So that to detect fraud that's not good, it's not good enough for that because, so but for research purposes it's pretty down good.

The files that we've created, I said we have multi-sample person file, which right now as individuals in the data all the way through 2010. We also have parent-child file. So that you could go in and my daughter might be, will be in there as an individual and I'll be in there as an individual, but then we have a file created that will link us together. We have participation file, so you can still go in and see, who had participated by programs; you can cut it by program, by person, by case and pull if you went into a case. We also have cross walk ID files and then other ones, location, race, ethnicity, constantly building what might be of use to researchers. All the files are linked by a unique personal ID that we have constructed in order to protect confidentiality and strip it all out. All of the source data though only our programmers can see we have a very established hierarchy, access to the data. And so for example Maria will go in as a researcher and she will look at a file that is completely stripped of identifiers.

I have one more level before I can go in and actually see individualized information and case files, but I've had to go through some additional training for security and I, our

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security officer will sometime walk around and you can't, can't leave your door open, you have to have, you have to have it locked down, you have to have your computer locked down and that's just what you have to do. And if you don't, you will get into lot of trouble somehow. So I would recommend that you get someone like that. If you don't have one, you want to do this. So very quickly, what kind of issues do we encounter trying to build this, well wasn't easy that's for sure and then every day we still find things that needs to be addressed and it's a learning process.

But we started out with its just an example, this was, these are actually numbers from when we first did it with a 2009 information. We had over 3 million records and what's called are care system, which would be the TANF, food stamps, Medicaid system five million records in kids, which would be child support, 1.6 million records in SACWIS, which would be child welfare. 90,000 in corrections and 35,000 in this the core records data, which is the hand, quoted data. Obviously you had to un-duplicate multiple observations per individual and there were lot of challenges not the least of which was multiple PINs personal identification numbers within data system. So it's like 13 different pins, within one system for the same person, trying to clean all that up. And then trying to deal with that with matching and emerging and trying to fill in missing data, it took one, our very best programmer; her name is Pat Brown over a year to figure out all the logic behind doing this. And that was built on about 20 years of her experience working with this data to begin with. She had worked on a very large product with Maria and said that if she had known what she knew now and she started out on that project, she would have constructed the data completely, differently.

And with the grant that we got, she was able to take the time to actually go back and do things the way that she thought this should be done. So I just want to emphasize if you are going to start to something this from scratch, it's a whole different bargain than building on the long years of experience that our programmers have had. And to say each programmers' are specialized in each of these systems and then Pat brought them altogether. So what do we do to pull this together looked obviously for a common identifying variables social security number, sex, date of birth, date of death actually works nicely, name and birth location, the more variables you add in, the better your problem, probabilistic matching can get. But, a really interesting lesson that we learned, looking for things that might be immutable is mother's first name, date of birth, social security number, in terms of trying to identify with her children, but this mother's identifier seem to have significant power to our ability to do these matches.

And father's information can also be used and vice versa all these matching across multiple places, but that mother's name for some reason turn out to be very helpful in pulling all this together. So here is just a couple of examples and some of the problems we ran into, Mike Seraph is now retired, he was our one of our partners at the state when we're working on this. So he has been memorialized in our examples. Here would be an example of pulling these records and they look, they might be the same person, they might not be the same person. Again kids are the child support system and care is the food stamps and TANF system. Different PIN number, so here we have two different PIN numbers in kids, and we have Mike Seraph, Michael Seraph two areas where the

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names might be the same; two similar date, dates of birth, but then the first kid has a different date of birth, but then you look at the social security numbers and it looks like the social security numbers and one and three might be the same. And so looking at cross systems we start to get some convergence on who this person might be. If you add in the mother's identifiers, now we switch to Pat as the example.

But you can look and see in kids that the social security number between kids and cares looks like there is a transposition. But, then there is a third prep round, now we're in the child welfare system. But, the first and third prep round have the same mother's first name, Wanda. So again we were able to use this to do some of the matching. There is a whole logic behind the frequency of first names and the uniqueness of first name. So if this was, if this was being matched on say a very common first name then the probability, would go down in terms of the probabilistic matching and that goes across all different ethnic groups too that would there is in terms of program and, how likely is a name to be the same name or not. And then trying to go in a fill missing data again here is another example against three main systems, now we've got a place of birth. We've got a social career and it looks like transposition. We look looks like the date of birth is the same for two of them, but there may be a transposition in the third one. All but, now we have the mother's first name Wanda and we have a verified social security number one system. So you go with the verified social security number from the one system and again with the probabilistic matching, this is probably the same person.

And this just shows you when we added in the, the mother's identifiers and tried to, use the multiple IDs to go through like in care's the raw data based on number of pins. We had 3.2 million in the final it still ends up to be about 3.2 million, but kids which is child support. We have almost five million and we start there and you go through and clean it up and we get down to 2.5 million and child welfare we start with about 1.6 million and clean it up and get down to about 1.4. So whatever key lessons been and trying to pull all this together. This collaboration between the university and the state agency and its predecessor agencies, our Department of Children and Families has been and continues to be essential. This is their data really it's the states data. We work with them to get permission to use it, through data sharing agreements and then through all of these protocols with security. We get the information directly from them, this is an abstract, we don't go ask them for this, we get the entire set and we go through and we do all this matching. We, this infrastructure in order to get this done and does require sustained commitment by everyone and is as I said a significant funding, challenge.

There are lot of big fixed costs, you're not going to find a lot of places that want to fund continuing of a data core until unless you can prove, it's worth and its value, because it takes we're going to update this on an annual basis and will basically take three months of every single programmers time to do, to do this. But, as it is expanded and refined, we're refining it can grow a number grow, a range of a, a number of different types of evaluations both for management and for general research. And an example would be I got asked a question, be able to ask the same question simultaneously after our meeting, two different parts of the room. If we could go in and tell using this data the extension which, the number of families who are involved with TANF receiving, welfare through

our system are also involved in the child welfare system, because they were unable to do that through the state system. And we could do it; we were able to write them a memo. Now we had to ask like clarifying questions like what do you mean by involvement in the child welfare system, do you mean referral, do you mean substantiated, do you mean out of home placement, what do you mean, what time frame do you mean there is all those questions.

Do you mean at any point, because simultaneous involvement is going to be limited to then on a time, was the child is at home or they'll be eligible for TANF that type of thing. Yeah those conversations and we got them a memo, I mean just, informally so here, because they're trying to figure out some policy and practical things about multi-system involved families. This happened on a number of occasions, we would not have been able to do that prior to this, let alone the big type of research that Maria is going to talk about. So, I'm going to stop there, and Maria is actually going to move into some examples of how we use this data.

Audience: Can I ask a question?

Jennifer Noyes: Yeah you can ask a question. You should, you need to use the mike though, I'm sorry it's right there, else you have my badge whatever taken away.

Audience: I just wondered over time has that you had any impact with the state in terms of all these systems developing common identifiers between, where are they, doing that or what's the... Is that matching stuff as you say can get really tedious and iffy I guess?

Jennifer Noyes: Do you want it?

Maria Cancian: Well we both have different takes on that so...

Jennifer Noyes: So here is my take, I'm a former administrator whose dream was, I just want to know, I just want to be able to follow a person across all these systems. I just want to know, there is still trying to build that system and that was 12 years ago. Our Department of Children and Family is desperately trying to figure out how to do this in order to be able to allow a case we could be able to see, where a family is showing up. It's really, really difficult for a variety reasons, which I see a lot heads noting, its and one of the things, I think one of the reasons why we've been able to do it this way is because we don't own any of these systems. We don't privilege any of those programs. We're just trying to get the data to work and so if we see a person who is in the child welfare data who is also in the kids data and we decide that the child welfare data is probably more correct.

We don't have any, it's okay, if the child support data just isn't not stuff that we're going to use, it's not like oh you didn't use my data type of a thing. But, I think the biggest challenge that they're facing, because we just had those conversation is, going through and the investment that it takes to try to clean this up across, multiple systems and the extent to which the claims on privacy and confidentiality can pull up a barrier to this

information, sharing. So there is a very, very strong interest in our state in getting this done. They just haven't been able to do it yet, and I think part of the problem is, is the resource problem. But, like literally not just even the money to do it technologically, but the time, but the human capital time to get it done. So, okay so I'm going to turn it over to Maria for some specific examples.

Maria Cancian: So I mean Jennifer started with or included this picture that we like that has iteration between IR, between the university and the state, which I think is really important. I think the other iteration that we have, and might have to have more than two sides is kind of a back and forth between policy questions, research problems, data issues that emerge in the midst of the research problems. So we go back and forth between developing a data system that allows us to ask one set of questions that raises another set of questions. We think oops we can't answer that, because we don't have these data. We go out and get those data and it's kind of again a pretty iterative and interactive process. And so what I'm going to try to do is summarize or give you kind of a taste of three or four different projects that we're doing that are mostly driven by the question of to what extent does income reduce or affect rates of child mild treatment and involvement in the child welfare system. And in particular, let's think about income that may be the same agency that runs the child welfare system has some control over, which is welfare or TANF income and child support income. And our question here is to try to understand that connection and to try to use the data that we have to try to answer some questions that haven't been answered in the past.

So this presentation draws from five different papers that I've had the benefit of working with lots of different people including Jennifer. And then we also need to think both the department for their health and our funders which include ACF and ASPEE in at the Federal Government, the Department of Children and Families, the Department of Workforce Development and the WT Grant Foundation, who funded different pieces of these projects. A lot of this is also kind of taking little bits from different projects to try to build these data core and answer these questions. So here is what I'm going to try to do. I'm going to talk a little bit about measuring cross system participation. I'm going to describe the relationship between child support receipt, TANF receipt and child welfare involvement. I'm going to spend just a minute talking about definitions and then I'm going to give you some examples and I'm going to try to skirt back and forth between talking about the data. But, then also engaging in that kind of substance of our findings, okay, so I hope this is two for one, as opposed to stuff you didn't want to know.

So here is an example just of cross systems participation, just kind of to give you the big picture. This is from, some recent work that Jennifer and Pat Brown and Eunhee Han and I have been doing, just to give you a sense if you take 2008 as a whole and you get different numbers, if you just look that point in time. And if you take the whole year of 2008, and you looked at families who have screened in CPS reports in June of 2008. So I guess I gave you the monthly numbers here are the overlap in participation. 7 percent of them were receiving TANF cash benefits, if you looked at a three year period that would be 18 percent of overlap, 14 percent we're getting subsidized child care, 51 percent received food stamp, 69 percent Medicaid, 49 percent were receiving child support. And

57 percent had parents with formal earnings in the unemployment insurance system. So this is kind of, if you will, I would have made that Venn diagram those overlapping circles that Jennifer did. That's kind of a, the numbers behind them, it's hard to draw the picture. So it turns out exactly that way.

So what I want to do is talk just quickly, this I don't really need to tell this audience about I spend a lot of talking across silos. So here is how we try to talk to people about our data on child welfare that there is a referral that some cases are screened in that screened in cases may or may not be substantiated. And mostly substantiated cases end up in out of home placement. But, sometimes unsubstantiated cases still ended up in an out of home placement. Here is kind of the similar over simplification for child support for those of you that haven't filed a lot about the child support system. A lot of, I just did the non-marital birth here a lot of our work focuses on non-marital birth; there is a parallel system for following divorce. In order to have a child support case, after non marital birth first you have to have paternity established, once paternity is established you need to get an order and once you get an order that order can either be paid or not. So I'm going to talk in a minute about whether child support is paid or not, but I'm also going to have to talk about, does this process and some people may or may not get to the point where they are at risk for having child support paid or not paid.

Because before you can have child support in order before you can get an order you need paternity establishment. So there is all of the steps along the process. And this is one of the reasons why it's hard to do this work, you need to kind of understand each of these processes and your programmers need to understand each of the steps or else your kind of not doing making, you're not asking sensible questions. It's different to not get child support because somebody didn't pay, then to not get child support because we don't know how the father is and we never asked them to pay. Those have two different meanings, right. And here is just an oversimplified version of the TANF application process because I am going to talk a little bit about that. People apply for W-2, which is what the TANF program is called in our system, they can participate and there is a bunch of different programs. They can participate in or they can dropout and I am going to talk to you in a minute about dropouts and they can dropout because they declined benefits, they missed an appointment and just kind of disappeared and never came back or they were denied benefits. And we are going to talk about some differences by those.

Just to make clear that we know this is too simple. Here is my simple picture. Here is the actual picture that we have in our report about the application process. So I, and this process, we could have an equally complicated picture for the child support and even more complicated picture for the child welfare system right. So I recognize this isn't oversimplification. But, Jennifer won't give me two hours. So let me talk a little bit about the relationship between child support and CPS. We have an early paper that use these data when we were first got them going to try to see okay what can we learn. Let's look at mothers who have a non-martial birth in 2004 and let's trace them for four years at that point we had data through 2008 and let's look at how likely they are to get child support or not and whether getting child support or not getting child support tells us only thing about their likelihood of being involved in the child welfare system, okay. Because

that might help us think about how we could coordinate across these systems maybe to the benefit of families. So, four years after the first birth here is what we observe. 80 percent have paternity established.

So 80 percent of these children that were born to unmarried moms we've legally identified the father, 49 percent of those with paternity established have an order and 82 percent of those who have an order have received child support. Child is subjected to a screened in CPS call. In the fourth year five percent of all the children who have been born four years earlier to an unmarried mom had a screened in CPS call. 14 percent have had a call sometime over those four years. So this is substantial overlap and substantiated maltreatment rates are obviously lower. So we have a substantial overlap and one of the questions is any of the differences in child support outcomes related to any of the differences in CPS outcomes? So this picture, I'll spend a couple of minutes trying to explain this. Each set of bars is for a different age, so and they each have the same pattern, so it goes up over time, but you just need to look at one set of bar. So if you look at the blue bars that tells you the rate of screened in report for people who had child support ordered, so they got an order, but they didn't actually get any child support.

And then the red and the green and the purple bars are the rates of screened in reports by people who got a little bit of child support, got a middle amount child support, or got quite a bit of child support. So we start with all of the children who are born to moms who weren't married in the entire state. They have to go through this process of having paternity established, getting an order, if that happens and then they don't get any money from that order 22.5 percent of those moms will have a screened in call. It's 13 percent among those who get a substantial amount of child support. Now that's cumulative and you can see age one, age two, these are all cumulative. The rates are obviously not highest. So this shows over this period of time. Now you might ask why are mothers receiving child support less likely to be involved in CPS. Well it could be a causal relationship, right. It could be I get more money that helps me meet my children's needs, that reduces stress and other ways and I am less likely to end up in the system or could just be correlation due to other factors. Okay moms who had children with fathers who pay child support are different. They may have better opportunities, they may live in better neighborhoods, they may have any number of other things that would explain that. Yes.

Audience: Is there a reason why the age topic is four years older?

Maria Cancian: Only because we wanted to use recent data, so we would have had to go back further to watch people for a longer period of time. No and we are doing, the work that we are doing now is a much longer timeframe. But, so there is evidence and I don't have time to talk about all that, but there is evidence in this report which is posted on our website for both interpretations, both for moms who get a lot of child support have other things that probably make them less at risk for CPS involvement. And I will show you in a minute we think we also have some evidence for there being a causal effect. And just to make a point, even one of those could be important if being, if I can just tell you a mom who gets an order and doesn't get any child support has a one in four chance of

being in the child welfare system even if it isn't a causal relationship, it just tells you this mom is at risk for other things. That could be very useful to you in planning a program or in targeting prevention resources right.

If you know look this is something that we know very early and clearly about people they walk in the door, they get child support orders, the Child Support Enforcement System is tracking payment. That's a very steady thing we do, it's very easy to print out a report of all the families who are supposed to be getting child support, not getting them. If we knew they had a one in four chance of a screened in call that would be useful information even if it had no causal effect. Now obviously if there is causal relationship here then we have an argument to be made for Child Support Enforcement actually being a child maltreat, away to prevent child maltreatment. That would be interesting for other reasons. So either way I would argue it's important to know in the system whether these relationships exist.

Audience: I am curious about the data that are you able distinguish if they want to have a child support order and are they also getting visitation right, so I am just trying to...

Maria Cancian: In these data no, Jennifer referred to we have only about 30,000 court record, where we actually go into the court and read the, I know we have legions of students who go in and read these records and we've done this over 20 years, so we a sample of about 1500 records in a cohort. And so for those yes we can look at visitation, but in the Child Support Enforcement System we can infer a little bit, but really don't. In the Child Support Administrative data we don't have good information on physical custody or on visitation.

Audience: The causal or whichever relationships you are measuring, did you see if it was statistically significant?

Maria Cancian: Oh, yeah and yeah in this report we have kind of all the formal tests for significant some things like that, oh yeah. So let me talk a little bit about TANF and then I will go back to this causal argument. So we were also interested in the relationship between TANF participation and welfare participation in CPS and so in this paper that Jennifer and I wrote with Eung Chung we took these TANF applicants. So we actually were in some county agencies, we tried to figure out the system that they use for managing the inflow of cases and in this case we read through, actually Jennifer did a lot of reading through and we have some graduate students, one of whom wrote a dissertation based on this data, who read through 2000 records in the four largest TANF agencies in the state to read through people coming in and then what happened to them when they didn't sign, when they did or didn't sign up for TANF.

How did they end up not signing up, were they, did they decide they just weren't that interested or were they denied benefits or did they just not show up, something you can't get from the administrator, its' not quoted in the administrative data. You have to read through case worker notes. So we did that and quoted that. And here is kind of the bottom line of what we found out. If you look at all the people who applied for TANF in

this two month period about 8 percent of them end up having a screened in CPS call in the year following that application. And it's about the same for those that received TANF and those that declined TANF or dropped out of the application process.

But, if you look in those case notes and you compare people who declined benefits, who learned about the program and decided they weren't interested compared to those who were denied benefits or just didn't show for an appointment because it's maybe a little bit, they knew they were going to be denied or who knows. Those rates are quite different. And you're at higher risk of having CPS involvement, if you walk and start the application process and then we are denied benefits or just became a notion. And again we can't argue this an evidence of causality, but it might give you some concern and this concern was part of what the department was interested in, was do we need to be worrying about families that walk in the door and ask for help and then we decide that for whatever reason they aren't eligible for help and is that coming back to be a problem for those families later. Yes ma'am.

Audience: Did you argue the same thing with the child support cases because you didn't have a lot persons and with the children half of your, if they don't have, they are not receiving child support...

Maria Cancian: So do we also have that relationship, I am just being asked to repeat the question because she knows I will make you stand up. Yes we have done some related analysis and I will get back to that in just a minute. So again we this problem though with this analysis of not knowing whether this is a causal relationship like I applied for welfare, I didn't get it, that increased the economic or other stress in my family and so my children were more likely to end up in CPS or is if that the same moms who have trouble negotiating the TANF process also have to negotiate problems and negotiating other processes that might get resources for their children or have health or mental health mental issues that both prevent them from applying, completing the application process and prevent them from providing for their kids. So there is evidence for both interpretations, so quickly because Jennifer is going to make me sit down in a minute.

I wanted to share a paper that Kristen Shook Slack who was going to be here and me and Yang and I have worked on that tries to establish the causal effect of greater income on child welfare and just Jennifer mentioned that one of the ways that we build the status system was through the child support demonstration evaluation, which was more than a \$10 million 10 year project that was designed to evaluate the full pass-through of child support and it's started in 1997 and one of the things that happened in that project was everybody in the state who applied for welfare or was participating in the welfare program was randomly assigned to either get to keep all the child support that was paid on behalf and their welfare or to just get their welfare and the first \$50 of child support. And so it was like a lottery. And it was completely random. It was based on some digits in your social security number and you would apply for TANF and everybody had to reapply because we were moving from AFDC to W-2, the TANF program. And when you apply you are randomly assigned and you either were told you are going to get say \$600 welfare and if dad pays \$300 in child support. You will get all 900 or you get \$600 in welfare and if dad pays \$300 in child support you only get the \$600 plus \$50, okay.

And because it was a random assignment it was designed to see what kind of effect that had on whole set of issues, it was not designed to see what kind of effect it had on child welfare, because that wasn't in our mind at the time.

But, what we've been able to do is go back to those data with those who are in with that random assignment and merge this with eWiSACWIS data through this grant and then ask this question, where people who are randomly assigned to get more child support more or less likely didn't make any difference to whether they were involved in CPS. And the advantage is that because it was random all those questions we had about the previous findings of well is it that mom has different characteristics or dad has different opportunities, all of that goes away because it was a lottery, which group you ended up in. So the only thing that's different about you is how much child support you get. And here is what we found is that the percent of moms with the least one child who was the subject of a screened in CPS report, just the simple comparison, that was about 18.5 percent among the experimental group.

They got to keep all their child support and about 20.2 percent among the control group, I mean these are statistically significant. We do have aggression estimate that controls for a bunch of things. It shouldn't make a big difference because this is a random assignment experiment and everything else should be the same. But, we find the regression estimate suggest that mothers in the experimental group who got to keep all the child support that was paid on their behalf are 10 to 11 percent less likely to have a screened in report. So we think that this provides some evidence for causal relationship. In other words the additional income may reduce stress, support good parenting or allowing dependence from other partners. One of the things that we found in other research is that mom's that were assigned to the experimental group and got to keep child support and welfare were less likely to re-partner with a man who wasn't the father of one of her children. So, there is lots of, we saw them answered, it's still a black box. We haven't answered exactly how this had this effect. But, we know it's not correlation due to other factors, because moms were randomly assigned the experimental and control group.

Audience: You know which on averaged the additional income line?

Maria Cancian: It was only a couple of hundred dollars. It wasn't a big difference and that to be perfectly honest when we started this I thought we would find no effect, just because we didn't have that big of a sample size and we have pretty big sample, but not that big and there aren't that many people that are involved in the CPS system is not that big of a difference of money. So I mean I think it's, we were doing, we pursued this not because we thought this experiment was the perfect way to test this, but because we thought it gave us an opportunity to actually get up the causal argument as opposed to just this correlation that maybe people who have resources and opportunities in one system also have resources and opportunities in another. So I want to end by kind of I said we have this kind of loop, so I've been talking about how child support income and welfare income can affect CPS involvement. One of the other things that we are interested in is CPS involvement that triggers different outcomes for example on the child

support system and we are working on a project right now that is about kind of appropriateness of referrals from the child welfare system to the child support system and I don't have results for that, but I will tell you kind of what we are doing.

So child support paid by non-resident parents can be, so usually fathers can be used to offset child welfare, cost of you have a child support order that's going to, I am going to assume that mom is resident, parent is not always the case, but makes the language easier. Child support that's going from dad to mom and the children never moved from home that child support should be redirected generally from the mother's home to the state and county to offset the cost of the child welfare out of home placement. And in addition the mom can be ordered to pay child support to offset the cost of her child being placed and that fairly common practice in most of Wisconsin counties for both of those things to happen. So the question that we have having spend some time in the field talking to cases workers you hear two things, you hear that the reduction in economic resources that come from taking the child support for mom or making her pay delays or disrupts reunification.

So you hear people saying one of the conditions for return is getting an apartment and getting settled and doing these things and how can mom do that when \$200 of child support is deducted from her minimum wage pay check automatically every month and so we are leaving the kids at home at much greater cost than what we are saving from saving this child support in. You also hear complaints from child support enforcement people who say I have limited number of child support enforcement resources; I want to be going after high income parents who aren't paying large child support orders, not after very low income parents who are managing a whole bunch of other things and I am trying to get a little tiny bit of money out of them that they don't have and that from a kind of resource allocation, it cost the same or more to enforce a tiny order on a low income person than a large order on a high income person. So you get some pushback.

On the other hand you get some people I have heard case workers say to me no you know the best way to motivate a parent to do the things they need to do is to charge them for having their kids out of home, okay. So you hear that also. That's an empirical question, something we ought to be able to address and we are addressing and before the 2013 conference within a year we will I have I think good solid evidence, I am tempted to tell you what we found so far, but I won't because I am not, I think that we have pretty clear evidence that there is a correlation between being charge child support and being out of home for a longer time, but it's very, very tricky because people are more likely to ask parents to pay and to enforce those orders if they know it's going to be, if they think it's going to be a long-term placement.

Okay, so if I think a child is going to be out of home for five or six months why am I going to spend a lot of time enforcing that order. Okay and so for those of you that are kind of statistics folks we are using the fact that some counties really go after parents and some counties don't, which is kind of random. Which county you happen to live in to try to instrument and get a handle on whether counties that seem to really pursue orders have different outcomes than counties that don't, because that should be about differences in

administrative policy, not differences in those cases and so I can tell you that there is a correlation, but I really I am not in a position to tell you whether I think it's a causal story.

And in this case the causal story is what matters in some sense is are we doing ourselves more harm than good, is the question. And we are interested in how if the implication timing is affected how does that change the calculation of cost saving? So cost drive a lot of decisions as you know. So one of the questions that we need to be able to say for example to a county board if we want argue that we shouldn't be going after these costs is its costing you more than its saving you, is the story about we are charging mom \$200 a month and therefore she can't establish stable housing and therefore the child is out of home at the cost of \$1500 a month to the county. So we are saving \$200, but paying in extra ex-thousands of dollars for a longer placement, totally putting aside costs of the psychological cost of the family. I understand that, but with the county board sometimes that dollars are more convincing, so being able to make that argument.

So finally let me just say that, so how are we using since this is the focus of this conference using research to support improved policy and practice, so one thing is that many families are served by multiple programs and in Wisconsin those programs, child support, child welfare and TANF are all administered in the same department. So when we think about child support enforcement and TANF programs we need to credit those programs for the reduction in child maltreatment. So and similarly when we think about cutting the child support programs or child support enforcement or TANF programs we need to think about the potential increase in child maltreatment. And we need to think about things like the unintended consequences of using child support enforcement to recover cost for foster care placements as opposed to provide income for families. We also think that information for multiple program participation can help identify the families most likely to benefit from prevention programs. So I showed you at the very beginning almost a quarter of families who don't get child support even though they have an order end up with a screened in call.

While imagine if we can use similar risk things from participation and non-participation in these different programs, in TANF, in child support, in food stamps and other things and create kind of an algorithm if you will that identifies high risk families and that might seem kind of not realistic, but in fact for example the unemployment insurance system does exactly that. They use information on people's employment and demographic characteristics to predict the probability that individuals are going to be long-term unemployed and to target retraining resources that are expensive that they can't use for everybody to figure out who would be most likely to benefit from those resources. So if you could figure out a way to target prevention resources this could be really useful.

And again a challenge here is developing a shared policy and practice model across the systems with different financing goal, so one of the things that Jennifer and I are working on most right now is a program to try to understand how folks in the child support enforcement system and how folks in the child welfare system think about referrals from child welfare to child support. What motivates those referrals, how do they think about

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whether a referral is appropriate and then how do we get those two systems to work a little more effectively together because there is a lot of information that could be helpful from one system to another and then there are some policy things that need to be done in a market wide needed fashion as well. And so we are doing pretty deeply in the weeds right now thinking about actual case, what actual case records, interactions with clients, how the information systems talk to one another and then how policy and how this research could inform those decisions.

Audience: So that concludes our formal presentation and we are happy to have a conversation about any of this or any of the technical details or anything that Maria talked about or any questions of interest that you might have, you think if you have this data what would you want to know out of it, those types and so....

Maria Cancian: Give us ideas. Other things we should be doing.

Audience: Yeah, so go ahead.

Audience: So I have a couple of quick questions, the first is about how many interims or graduate students did you use let's say a semester or a year to do some of this really intricate hand research?

Maria Cancian: Well, so we have six full time computer programmers who work on this. There are about three PhD level researchers, who spend full time working on this and there are, so I have maybe six to eight graduate students at anyone to PhD students who are working on this. The core record data collection has a separate staff of six full time people who actually aren't, they are usually former students or future students who work, who do nothing, but trouble around the state and go to different court houses and collect data. So there is a lot of different people and some of these projects involve graduate students who work for other faculty. So we probably have what, do we have 15 or 20...

Audience: If you reach...

Maria Cancian: These students are IRP; you are not at all working with the illustrative data. But, it's a large operation.

Audience: Okay and then my second question, so you talked about the experimental design of the study, and you mentioned social security numbers, but then you also mentioned a lottery and so I am kind of interested on which method of randomization would you...

Maria Cancian: So randomization was, it was a random assigned that was based on an algorithm using social security number, so I don't actually know, if the x digit of your social security number was even you were in the control group, if it was odd and then it actually wasn't even on because it wasn't 50/50 randomization. But, 20 percent of people were put in the control group and everybody else was in the experimental group. And it shifted a little bit over time. But, the point is it had nothing to do with your,

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anything about you expect whether I'll just say the fourth number of your social security number was a two or six, then you got in the control group.

Audience: Thank you.

Jennifer Noyes: Any other questions, yeah.

Audience: *[Indiscernible]* [00:56:16].

Jennifer Noyes: I can repeat it too if you want to stay in your seat.

Audience: I guess nuts and bolts, a technical question when you started this in the, with the 97 or did you have programmers already in place to view the system, did you kind of coop some of the programmers who worked with these different agency data to come into this or did you develop in-house.... *[Overlapping conversation]* [00:56:45].

Maria Cancian: I can answer that, both. But, *[Overlapping conversation]* [00:56:47].

Maria Cancian: Yeah we would not steal other people's staff. That was good, she was, it was her staff. So this project evolved from a, if you remember the battle days when we used to use like computer cards and you can do your programming okay, so IRP had a long history of doing a lot of analysis from a time when using sensors of CPS data you couldn't just download it on your laptop. So we had a bunch of people with very strong programming skills and then we started using administrative data actually in the late 80s for various kind of projects and it didn't, we didn't start thinking that this is where we are going. We started doing fairly small scale things and then what happened was with the child support demonstration evaluation, which was an enormous at, its peak was \$3 million a year evaluation. We really staffed up and we were able to get people that had expertise in different programs.

And that's, I mean one thing that I think is very hard, it was very hard for me to understand, was that, learning one of the systems like the kid system, the care system is at least six months before you're even semi-competent. And then what happens now is Jennifer mentioned we got a request to do a memo, our programmers get requests now from staff at the state, do you know how to do with this, because our programmers have a little bit more time than staff in agencies to kind of explore the data system, they don't always have to be quite so immediate task focused and most of our programmers either currently or in the past have spend some regular time with the desk down at a state agency, where they were actually there and they attend those kind of usually biweekly meetings about systems changes and they at least for a period of time attend those meetings. So they are aware of changes because all of these systems as you know are designed to help administer a program, they are not designed to give us data that we can use for research. And if you don't recognize that you make a lot of really bad mistakes, because the data that you can believe are first and foremost the data that will be audited, and then secondly things that are really critical for operations and....

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Jennifer Noyes: And just to add, so I had said we, the most recent system we brought in was the eWiSACWIS system and that was actually there, we have a programmer who had to go out and learn everything about, everything she could about it and then has spent all this time, so that's definitely an in-house, there was nobody resident in our staff who understood eWiSACWIS. There was people like me who are super skeptical about what was even in there because I was around it when it first got brought up in our state and I can't believe any of it. So we have this range of trying to go out and understand what's happening and Maria had said a programmer has to spend time up in the agencies and make sure that they know what's going on. But, we, our programmers also –we have them go out into the field to actually see what's being inputted by the workers.

So for example a younger man named Katie Thornton who is doing a lot of work with me than while he is bringing the corrections data we needed to go out to see exactly what was happening on the child support side of things and they were trying to find people in prison, so a little bit different than the child welfare stuff, but we went out and we just watched what was actually being inputted and how the searches were being done and we've gone out and looked over the child welfare. But, they are literally doing and then saying, just be able to say oh wait a minute, that field is supposed to be used for whatever ex-reason and then you get a answer yeah we know, but it's much easier to just default in this direction and so as a researcher we can use the field for what we thought it was because of the work, which we are using for different reason and we spend a lot of time, this is all, a lot of this is quantitative that Maria was showing you, but it' build off of a lot of qualitative work and it includes programmers like I said so they are not just sitting in there, they are just not programming away, we get them out.

Maria Cancian: And you know so when we started there was eWiSACWIS stuff. We spend a couple of days in the intake center in Milwaukee, which is our largest city, with me and another faculty member and two computer programmers and an NRA listening to intake calls and watching people not filling their screen, taking their notes on pieces of paper and then go back and filling the screen, which help this understand a little bit more why things were filled in the way that they were. And just understanding why things get populated in the way that they do and then we spend a lot of time in meetings with that range of staff because I don't understand these aren't like flat data files right, they aren't. So I don't understand the technical pieces, but I might understand some of kind of the, some of the substance, we also have some folks that have a lot of experience.

For example doing child welfare case work, who might understand other parts of the substance and it's bringing all of those things together that there is a lot of potential for miscommunication even within one system like the eWiSACWIS. And then when you are trying to, just if you think about eWiSACWIS what matters is the child and then maybe the parent who is responsible for that child's wellbeing. In child support what matters is a couple who are biological parents of a child, but it's really oriented around biological and legal paternity for that child. It's a whole different set of things that matter and that informs even what Jennifer said about the difficulty of merging data, what matters and what you can believe in each system are different, not even because one

system is better quality than another system, but because what matters for this system is where the kid is living.

And what matters for this system is who is legally responsible for that kid and what's the, not the date the child was born, but what was the date legal responsibility was established. So each of these systems have a different logic and it's very hard for, I think it's impossible for any one person to have the technical knowledge and the substantive knowledge across all these programs, so this is really a team sport and it's an overtime team support. And I think one of the biggest challenges is how, this is sort of a fun part. But, there was a lot of, there were a lot of weeks when I had very, very long frustrating meetings with people when nothing we were gaining out of these data made any sense to me and I thought why, we just couldn't get the numbers to match or to make any kind sense and it just took a lot of iteration to do that and then when you are done it's very hard to be honest, it's very hard to get anybody to pay for that. I mean it's very hard to motivate people to do that and it's very hard to convince a funder to invest in that kind of infrastructure because you can't do all this, now we can do all this real cool stuff and what we've been able to do is say we can do this really cool stuff with these two systems, why don't you pay out, give us the support to add this third one and then so on and so forth it's been very much that kind of ongoing process. But, if you told me literally 18 years ago when I started that was going to take this long to get here, I might have picked it different. Yes.

Audience: Then you were just speaking to at my question, I wonder how long it took you to even start the collaboration process in terms of how many or agency is willing to give you that data like looking that process you even look it when you start the pretty good response *[phonetic]* [01:04:38].

Maria Cancian: So the question is about the collaboration process, I just note, I keep in myself being recorded and it's okay, it's my fault. Okay, so I think the, so Jennifer can speak to this too, I met Jennifer because she was the boss of the boss of my program officer and I was going and presenting the results of some of the research that we were doing. I think that this takes a lot of time in investment and trust. And one of the hardest things is for everybody to actually not just pretend but really believe that what the other person is doing is important and I think it's difficult for researchers sometimes to really honestly understand how difficult and important what is happening in the field is and I think it is sometimes really hard for people on the field to believe that anything that a researcher can offer you is going to have any, is really going to actually help you do something important in a different way. And that's about all kinds of disconnects right, timeframe, resources, language, values and I think we that it just takes it takes repeated experience... To about trust.

Jennifer Noyes: Right, right. And then it's also the legalistic side where we had data sharing agreements across all the agencies, each one negotiated through the attorneys, through our attorneys and we have to go through the whole IRP protocol on campus, well if you are on a campus in terms of human subjects and we are, we as strive as an organization to be a squeaky clean and model behavior on both those areas as possible, so

that we don't get into any issues. We have protocol setup with the different agencies about getting individualized projects approved. So a random researcher just can't come in and say we want to use your data it doesn't work that way, and we have to always show that it's going to be result in a legitimate set of findings that will be of interest to the agency and not just for some journal publication. I think part of what it has helped with all of this in terms of historically within IRP is that there is this set of us that was recruited or came from a state... Than can bridge, they can have the conversation in both direction. So my background is not academia. I am been there now for quite a while, I realized this weekend, but to be able to understand both sides of the coin and IRP actually has had a series of individuals like that. But, as Maria said I think the fundamental thing is the demeanor of the researcher is towards the state agency in terms of mutual respect and also this iterative of, this helped, this ability for example last week just to say oh yeah we can do that for you without making it be really difficult over time, but it has been a long process and the other thing that we had to take into account is obviously changes in administration and political dynamic. Yeah.

Audience: I have a couple of more questions I am going to *[indiscernible]* *[01:07:47]* as to referring to be back a little bit, so we have this data that's pretty clear that income make it different, but they way I got the, both way I am nationally at a big level, the economy is sending more people outward and people are also in dropping every state, so any theories on why big interval when that seamless relationships of fairly depending each of checking report and income rather?

Maria Cancian: Well so there is been a big dialogue about this, I am not sure. I can say the things that people have said and which is reporting resources have gone down, people are managing to their resources and things like that. I don't think that our data particularly are useful for when we try to do some stuff looking at differences in unemployment rates for example, but I don't think we are in a particularly good question position to shed light on that. Do you have any answer to your own question? Often people have an answer to their question.

Audience: Let me I think if we could think I mean it is, the system is spotting that yet people who has called in giving up and I am calling in that's the part that I got it. Missed the ploy going. But, then to answer the question about, so this seems to be a, this is something obviously we should be doing in terms of maybe checking, I may not just adopt children getting me the early interventions of a system, it should be getting at the captain in trouble, or how are kids Doing in school that are in a child welfare system that's something that the state should be itself doing, I mean you talked a little bit about areas in the state doing standard work itself and...?

Maria Cancian: Well I think it's not possible for the state I mean, so I believe we are getting cuts, but states are, state staff are going to cut enormously and I think I can speak just from the Wisconsin whereas people are being asked to do a tremendous amount to kind of do day-to-day and this, one of the things we have on our little graph about an advantage that the university has is timeframe. So I can't think about something that will help for two years and think okay well I can spend 25 percent of my time for the next two

years on something that will be useful and I think that's just right,, really not feasible and I think for reasons that Jennifer has actually done a lot of work on doing cross systems things are particularly difficult because you have to cross those side and I don't just mean technically difficult, but when I am a manager and I have to cut a bunch of things one of the collaboration with other institutions is one of the first things that get that.

Jennifer Noyes: So if you are talking about specifically looking at like managing the, like looking at the prevent yeah, so if Christie have been able to make it, there is some effort being undertaken within Wisconsin to actually do some evaluation of those types of issues about their early intervention and that prevention type of issues and a lot of that investment is coming from the Children's Trust Fund side of our state and Mary Ann is from the Children's Trust Fund who is going to be here, so they are actually gone through a series of pilot evaluations looking at some of those issues that you brought up about the early intervention, the connection between some different types of program types and outcomes, what they said funding to the Children's Trust Fund and then also I am doing some with the some KC Foundation money and that has been very much that question about this is program intervention, what does it result, what's the result in terms of outcomes that hasn't been scaled up, they were doing pilots, but that was, and those are evaluations that Ronnie and a colleague of hers has done, I mean Ronnie -yeah Christie and a colleague Ronnie has done and that was funded with state funds, but again coming through and using the data that we have.

Audience: And more to answer the question is it happening in that sort demand or to say where I am seeing enough kids being in services and when we are hearing we need to do something.

Jennifer Noyes: I think in theory that's where they were going to be going with it. The project is like partway done, but yeah. So I think we have time for one more question.

Audience: I have a question about how you manage data quality if you are doing at the agency level of like each agency has their own mechanism for making sure that the data that they've put in is of good quality or if you're having to do that management kind of at your level, and you mentioned earlier you can't really go back to people and say that is not good or there is some kind of challenge with that/

Jennifer Noyes: Well we do tell them your taste is not good, but we'll say maybe you should use it field. I think we see people on the field and they'll, on the local level because this is all being inputted locally. There is wide variation in terms of what's actually getting put in, but as Maria said that awareness about what type of data is valued by which system in terms of the credibility, we come to understand that when we do double checks and so even like night we were talking about a data that does happen, that doesn't make any sense and so then our programmers will go back through and look at that field and then so that's what the field says and then they'll go back and talk to the people and agencies and say this is not making any sense to us, why you think it's not making any sense to us in the kind of work backwards from that direction.

Maria Cancian: And then some cases the results from this projects involve going back to case workers and talking about why data matters, so one of the things that's really, when you are filling out, when you have a really 45 minute data collection exercise that you are going through with the client and then there is a screen where you're collecting information say about the absent parent as we refer and you have no idea why you are filling that out because you just harass this client about a bunch of other things. You tend to fill it out with kind of not, with like ask the question and then move on and if you know that that data then populates another system and that the fact that you didn't bother to get the fathers, the name of the mother of the father where the father might be located means that the child support person is going to have an enormous headache, then you will, many case workers will go ahead and make the effort to get that information.

So that's a part of this iterative process. We present to the results about how child support can help reduce child maltreatment to child welfare case workers as part of a process to try to inform their efforts to collect better information so that we might be able to establish orders for non-custodial parents to help reduce the child maltreatment. You have to kind of, so it goes, sometimes these data are bad because people don't understand every piece of information undertakes time and effort. And if you don't –aren't clear why you need to do it, you are, in every moment you spend entering data is a moment that you can't spend working with the client on something else. So if it isn't real clear why that's useful I wouldn't enter either. So there is, I mean there is some kind of iterative process here of demonstrating, not just convincing, it's not an argument demonstrating to people that if they enter higher quality information it will actually have some payback to them in terms of their ability to manage to understand how to meet their client's needs more effectively or at a higher level to manage their programs more effectively.

Jennifer Noyes: You had a follow-up, did you have a follow-up?

Audience: No I think....

Jennifer Noyes: Okay. The other thing I was going to say in some of these systems if it's like a verified social security number they have to mark it as verified or it is from the UI the wage information there is different components of what we put together that are not necessarily subject to worker interpretation or choice, right and then other things are subject to choice and so those are things we make sure we understand real well and is like I said we starting seeing things that are just don't make any sense comparatively across counties and we have to figure out what's going on. So well thank you all very much for your time and attention. We will get this as along with the material that Christie had prepared that she didn't get a chance to present to the conference organizers. We've like messed around this last night, so we will get the new one, the updated version to the conference organizers and if you have any questions IRP's website is out there, you can just Google IRP and its also in the, our emails are in the contact information, if you have any more questions, we'd be happy to answer them for you. Thanks.