You're listening to a UC Davis Center for Poverty Research Conference podcast. I'm the center's director, Ann Stevens. In October 2015, the center hosted the conference Employment, Earnings, and Inequality: Realities of Opportunities in Low Wage Labor the markets. The conference featured experts on labor markets who presented both quantitative and qualitative research on a wide variety of topics.

Including wages, shifts, and occupations, immigration, and the lives of low skilled workers. In this presentation, Jeffrey Clemons discusses his work on how the Great Recession affected employment, and income for low skilled workers. Clemons is an assistant professor in the department of economics at UC San Diego.

>> Okay, so I think if there's a common theme here in at least the last two presentations of the day it's that public finance economists in their 30s think it's interesting to look at the minimum wage interacting with stuff.

And so, this will be in the minimum wage interacting with stuff, specifically eligibility notches associated with public health insurance benefits through the Medicaid program. And I guess just one thing to flag at the top, is that whereas Dave's analysis of the minimum wage, and the earned income tax credit is a pretty broad, full population thing what I'm going to be analyzing is going to be sort of an attempt.

It's going to be an attempt to learn something about what is going on in low skilled labor markets, that's going to be sort of specific to a relatively narrow group of the population. So, this paper is joint work with Michael Wither, who was one of my grad students at UCSD, and has since abandoned me for the private sector, leaving me to kind of steer the ship all by myself, and this is the first paper that I would say that I've written where the kind of, what I would at least hope to think of as being the big ideas lurking in the background were very much a product of having taught the portion of UCSD's undergrad and grad public finance sequences, which is about low income support programs.

And having had that experience of teaching the grad version of that course three times, and the undergraduate course two times, I basically have two main observations that have come out of that. The first is that, there are a tremendous number of programs that are associated with the landscape for supporting low income folks.

To the extent that we actually refer to it, as the patchwork of policy instruments. And it's such that, you could basically burn through the entire five weeks that we developed of this material at UCSD just by standing there and describing the landscape of the program. So, at some point you have to get on to the.

The theory in the empirical work, but you can stand there talking about the landscape of programs for the four or five weeks. So, just to provide a little bit of a flavor of kind of, how I think about the kind of topology of these programs, so if you start thinking about sort of money income or cash based assistance, we have progressive tax code.

We have means tested, sort of traditional cash welfare benefits. We have wage subsidies that are tax financed in the form of the earned income tax credit. And then, we have wage regulation in the form of the minimum wage. And you can turn to sort of another huge landscape, namely the health insurance landscape, where we have tax financed public insurance benefits, so the Medicaid program.

We have tax financed subsidies for purchasing insurance on the exchanges. And then again, we have a case of sort of regulatory approaches, in particular the regulations against insurance companies charging different premiums to people who have pre-existing conditions, and then, you can move into other domains. So, you can move into housing, and you get sort of the same typology where you have tax-financed public housing projects.

You have tax-financing vouchers, or other sort of subsidy arrangements, and you have rent control as a kind of Regulatory approach. And then, to make it even more complicated, many of these things are sort of state, local and national versions of these types of efforts. So, it's sort of a tremendously complicated environment.

And, when we go to explain how we think about, well, do we want it to be a complicated environment, or do we not want it to be a complicated environment, when we typically describe this patchwork as being pitted against is sort of the, the simplest possible way that you could imagine setting up a single program to eradicate poverty which would be to just set up a basic income grant that's set to equal the poverty level income for a household of a given size or

maybe, or maybe a lit bit more generous.

And then, to tax that away with a rate structure which is progressive, so that then, you've got your high income folks both financing the grants to the super low income people, and also the other stuff that government does. So that sounds simple. It eliminates poverty kind of by definition of how you've set it up.

So, what's wrong with that? Well, what we usually walk through as we talk about what's wrong with that. Is that it's sort of ill targeted on a couple of dimensions. So, for one, it's a pretty clunky way. The kind of poverty line is a pretty clunky way of thinking about sort of total household need.

In particular, when you think about the differential health needs. Say of households that have a member that has a disability. Or that has some sort of expensive, chronic health condition. And you can see how that's why you kind of get rationales for bringing maybe a sort of health focused component into your redistributive system.

Its also targeted in the sense, that it doesn't really, it has no bells or whistles or doesn't really do anything, to screen people who we might think of as being sort of relatively un-needy, or sort of potentially capable of of taking care of themselves. And would do so, in the absence of this program existing.

And so, as we walk through the different elements of the patchwork, there are these, and very simple papers that are theory papers on this portion of the public finance syllabus, which walk you through arguments for how these different elements of the patchwork can kind of work to serve these functions of better targeting benefits at the people who we think really need to receive them.

What I think we're really bad at, in this portion of the public finance syllabus. Is thinking not so much about the straw man of do you want to do it through one program or through a bunch of programs, but about thinking about this problem on the margin. Now, if we had some additional state resources, and we were going to think about how best to deploy them, would we be better off sort of adding another kind of targeting or screening mechanism, or sort of a new type of benefit.

Or would we be better off scaling up the set of benefits that we've kinda already have in place. And so, that's kind of the broad sort of agenda that I am kind of trying to get at. And I think is getting as well in this kind of program interaction portion of the low income support literature.

So, sorry, that was a very long-winded observation number one. Observation number two, is that the parts of this patchwork of policy instruments moved pretty regularly and this has been particularly dramatic in recent years, so you know, we have dramatic changes in the health insurance landscape through the Affordable Care Act.

In the context of the recession, you know, the generosity food stamps was temporarily increased, and then, scaled back, the duration of unemployment benefits was pretty dramatically increased and then scaled back, and then, of course, the minimum wage has changed at the state and federal level with great frequency over the last.

Over the last several decades. Now, of course many of the changes in these policies you would think of as being kind of meaningful reform, but some of the changes also seem to have the flavor of, you know,if they're a bunch of policy levers it's like Democrats want to run down the aisle hitting the ball up in the direction of more distribution, and then, the Republicans come and try, and put them all down in the direction of less distribution.

And that's what I'm getting at when I use the sort of pejorative sounding term tinkering. And of course, the policy reform that you favor is meaningful reform, but then, when you look at the idiot next you the policy that they prefer is the one that's the the senseless tinkering about with the system.

So, the question that I wanted to ask, and that I'm exploring in this paper is the question of whether or not this kind of tinkering is costly to beneficiaries. And if it's literally the case of just sort of moving a lever in one direction, and then, moving it back, I think we would all have the sense that.

At best that can be sort of a neutral action. And at worst is probably going to have some costs. But what I wanna think about more rigorously in the context of this paper is sort of analytically, under what conditions would you expect there to be costs associated with that tinkering about with the system.

And then to go to the data in a very particular kind of selected scenario and get a sense for whether or not these costs appear to be manifesting themselves. So to be a little bit more analytic about it, what's going to drive whether or not this sort of shifting about a program parameters is costly.

When we shift around program parameters, essentially what we're doing if we were giving a lecture to undergraduates in economics, we're shifting around the budget constraints or the opportunity sets that they face. And so, the question of whether they're going to be costs to kind of shifting it in one direction and then pulling it back.

Really rides on how difficult it is for people to adjust to this change in the opportunity set that they face. And there are kind of two different flavors of adjustment frictions or adjustment costs that I wanna highlight. So one is informational. So it could be that programs are changing in ways that would lead a low income household to wanna rearrange its affairs if it was sort of fully aware of what had happened to the landscape.

But then not everyone is quick on the uptake, or sort of knows that the program landscape has, and I don't mean that pejoratively, because just keeping track of the whole thing is difficult enough if you're a professional public finance economist and this is your job. So it would actually probably be irrational to be paying attention to how all of the program parameters are changing.

So I think we have some excellent work on precisely this point, so as Mary Ann Page was pointing out, economists don't say a lot in praise of one another when they introduce them to speak. So the junior economists have to band together and reference one another's work when it's good and it's on these things.

So Day has a paper that's forthcoming in the Economic Review, it's not out yet, it's still in press. Which is on sort of these issues precisely in the context of the Earned Income Tax Credit to which he's devoted a great deal of study. One of the earlier papers that I had read that got me thinking about these kinds of issues was some of Anna Eiser from Brown University's work on potential impediments to people taking up Medicaid benefits for which they're eligible.

And when you think about this framing that I gave at the top, if we're thinking about adding a new layer or wrinkle to the eligibility rules or the program space as a way of kind of better targeting benefits. But we're making things so complicated that people can't keep track of the information.

Then those kinds of costs are going to sort of erode the benefits associated with whatever frictionless optimal screening model we had in mind when we recommended the program. Yeah.

>> So, you were also saying that if I were to toggle a switch back and forth. And if I go from \$100 worth of benefits and \$200 back down, this has a cost.

Well, that sort of assuming a model like, what if I just toggle \$100 and every once in a while, maybe not as often as I'm capable under the rules. But an extra hundred bucks shows up in my pocket-

>> Yeah, so for cash benefits I actually completely agree with you.

So the scenario that I'll be looking at is going to involve transitions onto and off of insurance, where I think this is more important. But yeah, if it's literally just a lump of money and some months it's \$200 and some months it's \$100, if you just ignore what's happening and know 50 averages is 150, then you'd be fine.

- >> Even if I were rationally expecting \$100, I get peer response. Isn't that cool?
- >> Right.
- >> You're just saying that.
- >> Yes, I'll be thinking more about when there are settings where the price is changing so an incentive like your effective meta tax wage rate or these insurance margins where you might worry that the thing that's turning on and off

is effecting some kind of continuity of care type of margin.

But yeah, I think that's a good point. Okay, so information impediments. That's adjustment costs number one on which we have some good evidence in the literature. Adjustment cost number two would be of the form you recognize what's happened to your budget set or your opportunity set, but it is just difficult.

Because you're at a particular job, and that employer kinda needs you to show up for a given number of hours a week. It might be difficult for you to kind of seamlessly tweak those hours of work in response to whatever change in your opportunity set has taken place.

And so here again, unsurprisingly the economists have been on the case, so this is sort of obvious stuff on some level. It is costly to adjust. So we have some very good work which has sort of, I'll emphasize, focused largely on the elderly population and then on kind of middle and relatively high income tax payers.

And so, the analysis that I'm conducting in this paper and then I'm presenting to you today is going to involve an opportunity to look at a scenario where it is very much kind of low skilled folks, sort of particularly low skilled, low earning Lowering the set of individuals.

And we'll be sort of exploring the relevance of labor market adjustment costs in that setting. Specifically, I'll be looking at how the employment, the Medicaid benefit receipt and the job search of sort of low-wage, Medicaid beneficiaries shift after a shift in the eligibility notch which is going to be associated with recent changes in the minimum wage.

And I think about this very much as an opportunity to learn about frictions in these labor markets for low skilled folks. Yeah

>> For something like a business cycle with fluctuations in policy In response to business cycle variations or was that? If there's a recession and I make unemployment durations longer or a potential duration of benefits longer, is that injuring or is that?

>> No, I mean both. So, in general I would, I guess I would think of what I'm doing is abstracting from fiscal type, policy type of considerations. But I guess as you're probably very familiar, even if you didn't have a stimulus type of motivation associated with the policy.

When you crank through your optimal unemployment insurance formula and you note that the elasticity is probably changing across the business cycle, that would actually be a. So that would be meaningful reform as opposed to, futzing about, sort to speak. Okay, so the plan for the rest of the talk so, I'm going to walk you not so much through theory as just kind of the particulars of the empirical setting that I'll be looking at.

Talking a little bit about the data. Showing some initial evidence that I have at least kind of found a sample of workers who were very much sort of affected by the minimum wage changes that I'll be analyzing. And then I'll proceed to follow what happens with these individuals' participation in the Medicaid program, their employment and their self reported job search.

>> Okay, so the basic setting here, as I've been emphasizing, the program landscape is very complicated. I just wanna focus on kind of a two element program landscape. So consider a set of individuals who are in the following circumstances. We're gonna assume that they're all employed at a legally binding minimum wage.

And that they could potential participate in some benefit, specifically that's going to be Medicaid, which is contingent on having income below some threshold. So this is what I mean when I refer to an eligibility notch, as opposed to being a benefit like cash welfare, where you start with some grant, and that's gradually taxed away.

Medicaid has historically been a benefit where you have this insurance, which can be worth thousands of dollars, in

particular at the household level. And that benefit goes from being thousands of dollars worth of insurance to zero if your income crosses some threshold. And it's like from basic theory which you can work through with a bunch of diagrams, if you want, but which I'll avoid doing today.

Is that you know many individuals would ultimately, in this scenario, find it attractive to kind of earn the income that's exactly the amount at the threshold. So that they kinda have the maximal income that would allow them to kind of continue receiving this benefit. Okay, so that's the basic setup.

The question that I'm gonna ask is what happens to these individuals if policy makers, tinker in the mathematical sense, I'm gonna mean kind of incrementally change one of the program parameters, and so we have two of them. In the empirical work, I'll be focusing on the minimum wage, but we could also think about the threshold.

So basically, the example would be, a marginal increase in the minimum wage, which has the effect of reducing the number of hours that you can work, that would let you remain on this benefit program. Alternatively, you could think about just more directly shifting the eligibility threshold itself, having kind of a similar effect on the budget set of the relevant people.

# Yep.

- >> So in a sense that your definition unexpected changes that too. Otherwise it wouldn't be working at exactly the threshold if I know.
- >> Yeah, I think that's exactly right. And in the empirical setting, just to be clear, it's not gonna be the case that the people are kinda in any meaningful sense, like right there.

They're gonna be kinda at a range of earnings that are sort of within striking distance so to speak of the eligibility. >> Sort of a general context, I wanna think about unexpected changes increase minimum wage as opposed to the minimum wage is indexed and everyone knows that it's.

>> Yeah, I think that's right. Okay, so getting back to the point I was making earlier about adjustment costs, so the implications of a change of this sort for beneficiaries will depend very much on how difficult it is to adjust. So the straw man of the no adjustment cost, frictionless world is a world where policy changes of this sort will have vanishingly small impact on any outcome that you might consider looking at.

And the reason for that is that essentially all of the individuals who were literally working at the number of hours that put them at the notch. Would find it optimal to just marginally scale back hours so that what you would see in the data would be no change in program participation, no change in labor force participation, in terms of the extensive margin, are they working or are they not working.

You would probably have a statistically undetectable change in the number of hours and well being would be up marginally because they would be enjoying a little bit more leisure time and working a little bit, working a little bit less, okay. So that's the world of seemless adjustment. When you go to start thinking about the world where there are adjustment costs, then you have to choices about the particulars of the adjustment costs that you're going to inject.

So I'm gonna totally kinda bypass that, you can read our three page theory section in the paper if you wanna kind of get a look at the flavor. But a variety of adjustment costs would generate the following set of differential empirical predictions relative to the seamless adjustment case.

So suppose that it's difficult to find a job that would let you do this marginal increase in the number of hours that you work or you could just insert the information friction that you didn't know, and it kind of snuck up on you that you were now out of eligibility status for this program.

So in this case we can see very, very different outcomes. Specifically, we may see that some individuals end up continuing sort of their same labor supply but ultimately ending up off of Medicaid or off of the benefit program. We might see some individuals who end up exiting the labor force altogether in order to kind of search for a job that would

allow them to actually retain eligibility for the program while working.

And then it's sort of trivial to note that in a world where there are no search costs or adjustment frictions, there's no search. But in a world where there are search costs and adjustment frictions, then there is search. And that search is costly and it's something that the government should take into account if it shifts around people's need to look for particular types of jobs.

And the policy reform here is a strong end in the sense that it's set up so that it doesn't do any good, that's the point of the tinkering side. And so all of these three outcomes are associated with cost and so we would conclude that well being would decline unambiguously as a result of tinkering in a world where there are a lot of these types of frictions.

One thing that's a little bit interesting maybe to note just in terms of the kind of theory is that if you do your budget constraint diagram and you draw your indifference curves, you would ultimately observe that there would be some types who would want to engage and search for the new job that's at the notch from the old job.

And there can also be some types who would want to engage in that search from outside of the labor market all together. And that's a just matter of what the specifics of what their utility functions look like, so that's all in the paper. Okay, as we go into the wild, or go into the data, things are going to be messy, and that's true for a couple of reasons.

So the first is that one of the things that I think has been sort of a source of some consternation within the minimum widths literature where it's difficult to isolate samples where anything more than say like, 20% or 30% of the people in the sample are actually minimum wage workers.

So that's a somewhat difficult thing to do. We're gonna be working with panel data from the survey of income and program participation where we'll be able to do sort of reasonably well on this margin by looking at the wages that people were earning during the periods that immediately preceded the enactment of the minimum wage increases that we'll be analyzing.

Okay second, Medicaid eligibility also turns out to be sort of much messier in practice than you might think. So Medicaid eligibility thresholds, I find this kind of bizarre, so they're all stated as technically being on the basis of monthly income. Of course, none of them are actually enforced on the basis of monthly income.

Once you're on Medicaid, almost all states, I think it's something like 47 states do annual 12 monthly assessments of your income or your qualifying earnings and then asses your continuing eligibility on the basis of that. A few states do it on a six month basis. This is also kind of a bizarre thing just on terms of program coordination to note that subsidies for which people are eligible on the exchanges are based on annual tax information whereas Medicaid eligibility, technically being done on a monthly basis, more stuff that could stand to be better coordinated in this space.

# Yeah?

- >> Of my 12 month review of those, am I being assessed over my prior 12 months or over my prior month?
- >> Is this a change that was part of ACA?
- >> It's always been what you're, Medicaid's been on monthly income. That's right, the ACA's on annual income.

And under the new law everything has to be done annually now, the number of states.

- >> So my presumption with a lot of this stuff is that, and in some level this is a punt, and if I wasn't an economist I would talk to people about it and get more actual information.
- >> Part of my assumption is that this is surely something that varies from eligibility assessor to eligibility assessor, just in terms of the details of sort of what that process is when they encounter you and ask you for your income receipts. And decide whether or not, to really push the line and if you're like a buck over the threshold and all that.

Other issues that make it difficult to be very precise with Medicaid eligibility in the data, so you observe earning self reports, those come with measurement error. And additionally the sort of income or earnings concept that's relevant for

Medicaid eligibility disregards expenses for transport to work, childcare and some things of this labor.

Which make it so that it's difficult to know sort of how exactly an individual's household circumstances translate into what their self reported income means about where they are, relative to the eligibility threshold.

>> So the scenario that I will be, that I'll be analyzing is to some extent, I'll argue going to make this not as devastating or as important as you might otherwise think it would be.

So I am going to be analyzing low wage Medicaid beneficiaries from a period that's gonna run from 2008 into 2012. Which will be a period that includes the last round of increases in the federal minimum wage, namely from a level of \$5.15 to a level of \$7.25, which importantly for my strategy was differentially binary across states.

So I'll have some low wage Medicaid beneficiaries in states where the minimum wage is going up by quite a bit over this time period. And some low wage Medicaid beneficiaries who are in states where the minimum wage isn't changing. It's changing very little over this time period.

>> Yeah.

- >> So do you also take into account state changes in the minimum wage over that time period, which.
- >> So, I'll show a graph that shows the average effect of two groups, kind of over the full time period. At least, when the period is on, so starting with 2008, there were very few state specific.

So some, that's kind of. There was basically a lull between the last increment of the federal and then kind of three years out. So there's very little of that in the sample. What's important to note in terms of the group that I'll be looking at here, is that to a varying degree across states, but in particular In the states where the minimum wage increases were binding.

And this very much reflects this is kind of a red states, blue states world, the Medicaid eligibility thresholds for parents, not the eligibility thresholds which are more generous for pregnant women, but just for parents, are remarkably low. Almost startlingly low. So often in sort of red states during this period and still to this extent that those states have not adopted the ACA's Medicaid expansion.

Parents have eligibility thresholds which are on the order of 40% of the federal poverty line. So if we think about the federal poverty line for 2009 for a family of three, and we used a percent of poverty line eligibility thresholds for sort of a select group of states.

What we see is that in Texas the relevant threshold would've been just under \$5,000, in Kansas under \$6,000, and in Mississippi just right in at \$8,000. While full-time minimum which work at the sort of minimum wage that was ineffective at the very beginning of my sample, which is the minimum wage from July 2008 until June 2009.

Full-time work at that minimum wage would have put you at \$13,000 It's essentially impossible to have a full time minimum wage job and to retain eligibility for Medicaid as an adult in these states. Over this full time period, as you see a 40% increase in the minimum wage that essentially means that you've gone from a world where in Texas you would already have to be working 17 hours a week, at most, if you wanted to me on Medicaid, and then that goes down to ten hours.

And there are essentially no jobs that are ten hour a week jobs in the sense of regular work. You might be able to find odd jobs that you can cobble together like that. But if you have an employer who expects you to serve some function, it's almost certainly going to be something that's more than ten hours a week.

So because these eligibility thresholds are so low, I'll feel comfortable empirically, just thinking about the full population of adult Medicaid beneficiaries, as people who are sort of not implausibly far from being in this sort of very particular scenario. Where 40% kind of in total ratcheting up the minimum wage significantly changes.

The extent to which you could engage in sort of meaningful market work and retain eligibility for Medicaid. And so,

this one of these points where, at least in California, we can say, hm okay, well, at least we're not in that situation. I think that this is actually a very interesting.

This would be something interesting to analyze as we get more data following the Affordable Care Act. Specifically the kind of reverse of this experiment, which is that the Affordable Care Act Medicaid Expansions have made it so that a low skilled Medicaid beneficiary could engage in meaningful work. And sort of retain continuous access to insurance through Medicaid and then transitioning on to the exchanges.

So I wouldn't be surprised if one dug into the data, If one found that there was an increase in labor force participation among relatively low-skilled folks in states that enacted the Medicaid expansions. So I'll be on the case. Maybe you will too. And we'll see if that plays out.

### Yeah.

- >> So what you're saying
- >> Prior to establishing eligibility or re-establishing eligibility, that the other 11 months of the year you could be working.
- >> Yeah, that's something that I wanna look into in a little more detail. I mean, I suspect that they wouldn't let you just show up and say, I only worked ten hours this last week.
- >> Officially you're not supposed to. I don't know of any states that check for doing on it is a good question.
- >> Okav.
- >> You'll officially lose eligibility, but.
- >> But it's not this.
- >> Right, right. Okay, so I've been moving painfully slowly unfortunately although I hope this has been fun.

So, the next slide is going to have basically a look at the main results of the paper. And then, the rest of the slides sort of walk through some of the details about what I worry about, and kind of what I need to probe with you, and the empirical analysis in order to sort of flesh this out.

>> So this is kind of the main takeaway figured from the paper. So what I am plotting out here are separating out individuals who were in the states that were bound by these increases in the minimum wage from individuals who were in states that were not bound by these increases in the minimum wage.

I am plotting just the time series and the fraction of months that these individuals are in Panel A, managing to both be employed and report being on Medicaid.

>> That these individuals are in Panel A managing to both be employed and report being on Medicaid. In Panel C looking at just employment, and then in Panel D looking at the number of weeks that these individuals report that they're looking for work.

And so what we can see is that in Panel A, this sort of may not come of interest. Can you sort of retain employment and participation in the Medicaid program? It looks like as we sort of come through the July 2009 increase in the minimum wage, there begins to be a departure in sort of your ability to maintain employment and Medicaid participation.

Between the bound states and the unbound states with individuals in bound states becoming about 15 percentage points less likely to sort of maintain this joint outcome of employment and Medicaid participation. When we look at the Medicaid participation, we see something very similar. It's kind of this large gap sort of opening up on the order of about 14 percentage points.

When we look at employment one thing that's kind of interesting on this particular sample of low wage Medicaid beneficiaries, is that their employment actually looks a kind of hold steady comparing the bound states to the unbound states the first few months following the increase in the minimum wage.

But then as the kind of Medicaid eligibility or Medicaid participation appears to lapse, you see some people leaving the labor force. And this is something that I find incredibly interesting just in terms of, in this context when you analyze what happened following increases in the minimum wage. Typically in the minimum wage literature everything is just treated as through it's telling you about some labor demand elasticity coming from firms.

What I want to highlight in this particular scenario is that when people's opportunity sets shift around in unexpected ways, this being sort of a particularly striking one, but one that affected a nontrivial sample of the kind of low wage workers. In this environment, this might primarily be labor supply, i.e., people voluntarily exiting in order to maintain their eligibility for insurance that's worth thousand of dollars.

The week's looking result is sort of, the reason it bops around so much is that people are, some months are coded as having five weeks in them, and some months are coded as having four weeks in them. This result is much sort of, in terms of the statistical analysis, much less precisely estimated than the results on Medicaid participation and employment.

But there is sort of a slightly marginal increase in job search that we have observe among the people in the bound states relative to the people In the unbound states. So I'll show you the specifics of that being relatively imprecise at the very end. Okay, so the details in terms of the increases in the minimum wage when I've divided the states out into these two groups.

I'm following them in this survey of income program participation which kicks into gear in July of 2008. So over this time period, there's a backdrop of the minimum wage having increased nontrivial in these states prior to the sample kicking into gear. Then during the sample, basically, the only minimum wage changes that take effect were the ones that were associated with the binding federal increase.

These people for whom I was just showing you all of these outcomes are people who I selected for being on Medicaid for six months between August 2008 and July 2009, at least six months. And whose average baseline wage over this period was less than \$8.50, so that they're kind of disproportionately minimum wage types.

And in the paper we show you that we can provide pretty direct evidence of the minimum wage biting these people's wage distributions. The concerns that arise in this setting are sort of two-fold. One is that the great recession is going on. That will be a concern for us to the extent that the great recession sort of plays out differentially across the bound and unbound states.

Basically the approach that we're going to take is to have a baseline where we do some stuff to control for that. And then to try to convince you that when we do anything else to control for that that you suggest that it doesn't change the results. The second approach that, the second concern is that, as I was mentioning, this is a red states, blue states affair.

Where the blue states had slightly more generous Medicaid programs to begin with. The reason that matters is that means that it would have been kind of easier to retain your Medicaid eligibility and employment in those states relative to the unbound states. Which means you might have expected the transitions off of Medicaid to look as they did sort of even without this minimum wage interaction on which I'm focusing.

So what I'm gonna do in order to try to get a sense for whether that's a concern is I'm gonna take similarly selected samples from earlier time periods and look at the transitions of these individuals over these early time periods where minimum wage increases were not going into effect.

And to the extent that we don't see that sort of netting out the transitions from these earlier time periods, kinda killing our results. For the economatritions this'll take a triple difference type of strategy, then we'll become at least more confident that difference in eligibility thresholds isn't what's driving what we're seeing.

Okay, so I'm gonna fly through this. I've already kind of walked through these general concerns. The economic strategies which made a different strategy where we're comparing changes in outcomes like Medicaid participation and

employment in the balance states relative to unbound states and then controlling for everything that you tell me you want to control for if I can.

And then the approach that's going to harness earlier set panels is gonna be a triple different strategy which looks much more complicated. But basically it just means that relative to what I showed you in the graphs at the beginning I'll just be netting out the transitions of that sort that we observe if we make those same graphs for earlier time periods.

And the easiest way to see this will just be when I show you the graphs. I'll skip the wage distribution stuff and just get straight into these outcomes so that I can show you kind of exactly what I meant by what I just said. So, this is the figure that I already showed you so we saw this differential decline in people being able to be employed and retain Medicaid eligibility.

This is the figure in which I show you how those same transitions unfolded during this earlier panels. Now, one thing that I should say so, one thing that's unfortunate about earlier panels is that they're all much shorter. So you can't track people for as long. So I'm not lopping this off at July 2007, because I don't want you to see what happened afterwards.

There was no data collected afterwards. But, though, what we can see when we look at these time paths for the earlier periods is that in the earlier periods, people's sort of joint probability of being on Medicaid and being employed basically moved in parallel when you compare the balanced dates to the unbalanced dates.

In the 2004 and 1996 panels in particular, a little bit noisier here than the 2001 panel. That's a case where it would be nice if the sense had funded worth of data collections that we could see what was going on. Unfortunately they didn't. What that means is that when we go from the difference in different strategy that's just based on this graph to the strategy that nets out the differential transitions that you see in all these other graphs, it's basically going to have no effect on the estimate.

#### Yeah.

- >> Are based on the 2009 Medicaid
- >> So it's based on being bound by the minimum wage increases. So essentially if you were fully bound by both the second and third increments of those increases, then we code you up as being a bound state.
- >> So there may be a different set per rim, different set of states.
- >> No, so it's always gonna be the same division. Oh sorry, it's always the same group of states. The reason I made these dashed instead of solid is to sort of highlight that these are placebo changes. So, basically I just take the earlier step panel, do the exact same sample construction procedure, and then look and see.

So if this went way down here then I would say, okay-

- >> What was the federal minimum wage increase in?
- >> Right, so it turns out that that was not particularly differentially binding across states, and so we checked that it the paper, it's not differentially binding across states in a way that correlates with this particular division of states.

For the Medicaid participation we see that it is in fact somewhat of a problem that the eligibility thresholds are different in these two groups of states. So when we look at the earlier time periods, individuals in states were slightly more likely Individual in unbound state to transition off of Medicaid.

And so what that tells us is that when we go to the triple difference framework it is going to cut a little bit off of the estimate. Sort of interestingly, it turns out that that's largely, as you might expect, given that there are these different eligibility thresholds, that's largely cuz people are kind of transitioning into sort of, into sort of something that's more like full-time employment.

It's slightly, at slightly higher wage rates, which is related to why the joint outcome of being on Medicaid and employed doesn't exhibit that particular problem. I have like two minutes left? Or is that, yeah, okay. So the regression results basically show exactly that, there are a bunch of robustness checks which I don't need to talk about.

I wanna say a little bit more about job search because that's something that's kind of interesting in the context of some of the recent minimum wage discussion. So as you can see, the job search results are a little bit on the noisy side, so the statistical precision isn't going to be great.

The most intriguing thing that comes out of our analysis of job search is that, do you mind if I wrap up the job search point and then come back? Is that when we divide people's time that they're looking for work into time looking for work while employed and time looking for work while unemployed.

We see the kind of and you know this is one statistically significant result in a table with many results. But sort of the one, that, that pops out. Is looking while employed. Which is something that was very much predicted by the kind of particulars of this theoretical set-up that I was giving you.

Namely that some people are going to find it attractive to start looking for work while they're still at this job that they prefer to being unemployed and having the benefit, but it's a job that's not going to let them maintain eligibility for the benefit. What's interesting about that, is that that's suggestive evidence that sort of pushes in the direction of there being this kind of very peculiar budget-set interaction going on.

Because this is the opposite of what you would predict in the standard minimum wage setting. Namely that if the minimum wage goes up, and you still have a job, then your job has gotten better. And if anything, alternative employment opportunities may have dried up a little bit on the outside.

And so in general the minimum wage literature predicts, you know, lower turnover as the minimum wage increases, and that would mean less time that you're working in one job and feverishly looking for employment in another job. It's sort of particular to the scenario that I'm analyzing where being in that job means that you're about to fall short a few thousand in terms of the value of the Medicaid benefit that you're about to lose access to.

So it's kind of a unique prediction. I wish it was more statistically significant, but that's sorta what we got. Okay, so with that I'll wrap up so that we can take a few questions. So what we've done here is we've tracked the employment, Medicaid participation, and job search of low wage Medicaid beneficiaries following some non-trivial minimum wage increases.

And the findings all seems generally consistent. There's some sort of potential ways that you could push and prod them But they all seem generally consistent with thinking about the low-skilled labor market as being a world where people do face significant adjustment frictions. Whether it's because there's sort of a lag in recognizing what's happened to your opportunity sets and your program rules, or because it's difficult to actually find a new job that would be kind of your new best labor market outcome.

So what do we conclude from this? Well because it's difficult for people to re-optimize as budget constraints change, tinkering around with program parameters in ways that aren't what we would think of meaningful reforms can be costly. And that's going to mean that there would be benefits from finally choosing a safety net design and locking it in.

And then also potentially from simplifying the safety net so that as it does change people will have less effort that they have to exert to figure out what exactly is going on. Okay, so I'll wrap up there and take some questions.

- >> Yeah, I guess red, you had a question five minutes ago.
- >> Can you go back to?
- >> Comparing across sip panels or the one that had the full set of outcomes?
- >> Yeah, yeah.
- >> So like for a your pretrends are basically right on top of each other. I see credible but for D the ruling is out for.

We are still planning but that just

>> Oh no, so I totally take that critique. So the noise is why sometimes it spikes a little bit. That's the five weeks, four weeks thing. So this is the number of weeks looking per month. But yeah so I completely agree that when you look at that you should think okay there is some difference in the amount of labor market search that's happening at baseline between.

- >> So it's not only baseline, cause when one goes up, the other goes down.
- >> Yeah, that's well. So this is definitely unique to the Blue Guys, yeah so there are some differences there that At one point
- >> Right, I guess it might be worth constructing a version of this figure which at least sort of gets rid of the four weeks, five weeks issue, by just doing it as the kind of binary, did you spend any time looking for work during this month?

# Yeah.

>> So two questions. One question, how much bunching is there at these Medicaid like in New Orleans? In the extreme case that, imagine that everybody in like the state was right under the threshold. It seemed like policy makers would be unlikely to move everybody over and have them lose their eligibility.

Are we more likely to see the minimum wage increases in areas that there isn't that much bunching going on? And then the second question was just a question on incidents. Because, like again, related to that idea, where like everybody is going to get kicked off these largest, move over the eligibility threshold, would employers then offer jobs, that have more flexibility so that they could sort of remain under, or like adjust their hours, or something like that.

- >> Right.
- >> Versus like if it's just a small percentage of the population, then maybe employers would design.
- >> So on the first point I would go back to my hemming and having about the measurement error and the difficulties of monitoring eligibility rules, and so at least in the SIP data, you wouldn't find any bunching.

Reflecting both measurement error and self-reported earnings, but also the fact that the labor market participation of low-skilled folks exhibits a great deal of volatility on a month to month basis.

- >> Okay.
- >> Was there more to the first question? Or is so I'm really riding on you being willing to kinda entertain this as a scenario where the sort of broad population group that I'm looking at, because the minimum wage changes sort of including the sort of earlier increments It's contracting the number of hours that you can work while maintaining Medicaid eligibility by 40%.

So that's a big chunk and it's gonna shift a lot of people who weren't literally bunched into this scenario. And that relates to the, sorry. So, what was the specifics of the second point?

- >> Right the incidents.
- >> Yeah, so I think.
- >> Yeah Like very much in line with the kind of the Danish tax data Roger's work on this is very much on point on that.

Yeah, so if you were in a labor market segment where a lot of people were likely to end up in this kind of situation, I would expect the kind of contracting institutions to evolve in a way, or at least you would hope that they would evolve in a way that would help people work this out.

In this particular setting, I do think that because these Medicare eligibility thresholds are so low, and then again I was emphasizing to the extent that these states have not adopted Medicaid expansions they continue to be that low for this group.

>> I think that once it's gotten down to the point where we're talking about ten hours of work a week, it's more an issue of there not really being steady jobs that take that form.

So it's not clear that you would even be like in the Danish case with the analysis of the The bunching at the kinks. That's very much the kind of, it's these huge unions collectively bargaining for over contracts for 10% or more of the population. And it's sort of full time employed, kind of middle income folks, it's like the teachers and And other groups of that sort.

So, and I can use that as a plug for this paper, or just, if we're looking at this market, learning more about what's going on with contracting flexibility and flexibility along other margins in this sort of very particular, but important segment. An understudied segment of the labor market is probably Something that we should all be spending more time on.

- >> So with the ACA expansion, this will all go in the other direction right? Cause now, if you're a parent, you have in these states, you have no eligibility between 50 and 100% EO, and if you're single you have no eligibility under 100% of EO.
- >> Right.
- >> You cross 100 and you, In the non-expansion states, then you can get access to the exchanges.

So we were expecting the next.

- >> That's right.
- >> If you're right here, we should see employment in the non-expansion.
- >> Right. You might see some pushing towards full time and some pushing in the other direction. Yeah, that's absolutely right.
- >> Relatively valued Medicaid versus
- >> That's right, that's right.

So there is something that qualifies as seamless insurance support but.

- >> No argument for
- >> Make it simple.
- >> Thank you.
- >> I'm Ann Stevens, the Director of the Center for Poverty Research at UC Davis and I want to thank you for listening. The center is one of three federally designated poverty research centers in the United States.

Our mission is to facilitate non-partisan academic research on domestic poverty, to disseminate this research, and to train the next generation of poverty scholars. Core funding comes from the U.S. Department of Health and Human Services. For more information about the center, visit us online at poverty ucdavis.edu.