

Shawnda >> Thank you very much. Good morning to those of you on the West Coast and good afternoon to those on the east. My name is Shawnda Schroeder. I am the principal investigator have the Rural Health Research Gateway, also referred to simply as Gateway. Today we are hosting a webinar entitled, "Geographic Variation in Health Insurance Marketplaces." For those of you that aren't familiar with the Rural Health Research Gateway, it is a website that provides easy and timely access to research and findings of the Federal Office of Rural Health Policy funded Rural Health Research Centers. We have various resources to 1997 all the way to present. Our goal is to move new research findings that's completed by the research centers to various end users as quickly and efficiently as possible. Our website can be used to find abstracts of current and completed projects, publications from those projects, and information about all of the different research centers as well as individual researchers. Following today's presentation we will have the webinar posted to our website. You can find Gateway at www.ruralheathresearch.org. There you can also join Gateway alerts to receive periodic email updates whenever we have a new publication available. It will also include an archive of today's webinar. I also encourage you to follow us on Twitter or like our page on Facebook to receive daily notifications on rural health research and to watch fun and interactive videos of our researchers and why they think rural health research is so important. All the lines are muted and we will open for question and answer at the end today. But I also encourage you to use the Q&A chat box at the bottom of your screen to type any questions you might have for Dr. McBride or Dr. Barker. At the end of the presentation, the HRSA operator will open at the line for any questions and those written in the chat box will be addressed only if and when those questions on the line are done. If there are questions remaining in the chat box at the conclusion of today's webinar I will pose those questions to our presenters and we will give you those responses in our research alert with the archive of the webinar. Thank you again for joining us today and now I'd like to introduce our presenters.

Professor Timothy McBride is an influential health policy analyst and leading health economist shaping the national agenda in rural health care, health insurance, Medicare policy, health economics, and access to health care. He is currently studying the uninsured, Medicare Advantage and Part D in rural areas, health reform at the state and national levels, access to care for children with special health care needs, and long-term social security and Medicare reform. In addition to his scholarly publications in leading journals, he has produced a collection of reports, white papers, and other policy products that have had an important impact on the national policy debate.

Professor McBride has been active in testifying before Congress and consulting with important policy constituents in Medicare and rural health policy. He is the Co-Director of the Center for Health Economics and Policy at Washington University. He is a member of the Rural Policy Research Institute (RUPRI) Health Panel that provides expert advice on rural health issues to the U.S. Congress and other policymakers.

I also want to welcome Dr. Abigail Barker. She is Center Manager for Data and Methods at the Center for Health Economics and Policy. She also provides statistical analysis for the Rural Policy Research Institute, working for the Center for Rural Health Policy Analysis. She received her PhD in Economics at the University of Minnesota. Current work focuses on understanding how markets can be successfully integrated into the health care sector, using the ACA and Health Insurance Marketplaces data as well as Medicare Advantage data to inform this question. Econometric modeling and microsimulations on this topic are her current focus. I welcome you both and thank you for taking time today and I will turn the presentation over to both of you.

Dr. McBride >> Thank you so much. We appreciate being invited to do this. We thank HRSA and the federal office for their support. You've already been introduced to us and the topic of today so we will right in. Before we get into this you can tell from the title slide this is joint work. Worked on by me, and Abigail Barker, Leah Kemper, and Keith Mueller and he is the director of the RUPRI, rural health policy and analysis center.

I'll introduce what we will cover today in this webinar. We will first give you some background on key aspects of the marketplaces to frame how we are going to discuss this issue and what the goal of the marketplace is. In terms of what was intended in the legislation. And what we will present, is this working in rural areas across the geography of the U.S.? We will dive into some of the data we have the following for over three years. Then we will dive into the findings and then we will end with conclusions and policy implications. In order to frame the questions, we will focus on the goal of the affordable care act. Marketplaces were set up where some variations in premiums is allowed and how they vary across different parameters and the parameters are listed here. They are specifically laid out. Premiums can vary based on age, tobacco use, actually it is not on here but your premium can vary by your constructor and geographic rating area is key to what we will be talking about today. No if all that variation works out appropriately with risk adjustments, then the variation we see across base put it not only reflect the variation in prices but the variation across different places. It should be an equal playing field. This assumes market places have a pretty high degree of competition on insurance companies to make debts works because this is a private sector initiative that these premiums are in alignment with this.

Our key questions are –and many people are looking at this – I think we have some pretty unique data. Is there competition to make these marketplaces work? Are the two costs of care similar in urban and rural places? So that frames the analysis there.

We have been looking at these changes since the marketplace opened in 2014. But our particular interest is the changes that went on during 2014 and 2015 and then in 2016. We don't have the 2017 data of course yet. There have been preliminary bids put in – and it's important to understand we can get to this in the questions –those bids are not the final product. We saw in 2015 there was not a uniform story to tell about role versus urban in terms of geographic variation. But you'll see in the 2016 data that there is a much stronger story in terms of rural. So that is our central question. Is what is going on in 2016 route and 2015 and do we see the low premiums in rural areas where they are found and how do they correspond to coverage levels and options? We will show you a little about enrollment, as well. Where possible, what policies will be associated with these differences? Now I'll turn it over to Abby who will talk to you about the data and dive into the results.

Dr. Barker >>> So first of all, just to explain a little about the overall data. This data includes all areas -- rating areas in the US. So in 2016 that was 499 rating areas. Which means we have the federally facilitated market places data. We have also sought on an individual state level the corresponding data for all of the state based marketplaces. It is important to note that ate this data before being analyzed are before subsidies are taken into account. So this is not meant to be a comprehensive comment on affordability of anything because all these premiums have the potential to be subsidized. Data for all plans, for all three years, 2014-2016, are included in our analysis. This is also for other data of the county, most specifically on population density. We will show you results that are only for -- FFM, we have not been able to get state-based data so far for enrollment.

There are a couple of adjustments that we make that we feel are important. First of all, I want to talk about actuarial value. Plans are classified according to medal value. So there is bronze, silver, gold, platinum and each of those respond to a different actuarial value. Meaning that the average consumer should receive that amount of benefit. How is that calculated? Firms submit bids with costs. These can vary – plus or minus 2 percentage points around those target values. A firm can submit a plan that is 68% actuarial value or 72% actuarial value and that will still count as silver. And how do they get that calculation? How does that number come up? There is a single underlying sample population that is used regardless of the location of the plan or the expected population who might sign up to have the plan. Their claims are based upon 2010 claims data trended forward. That is how they get the expected utilization and cost estimates of what is going to be delivered. The problem is there is no adjustment for regional variation in cost. So it is more expensive in a particular area, the actuarial value won't capture that. However, when the firm sees that come through with their own data it is actually likely to change what they want to do and what premiums they want to charge. We feel that this is going to be especially true in cases where competition is limited. If we know the metal level, then we know the premium we will roughly know the actuarial value.

Another adjustment we make in our work is to adjust for cost-of-living variations. As we all know, some places are more expensive to live than others. Premiums may simply reflect price differences. A \$200 premium a month in someplace like Waterloo, Iowa is more expensive in the terms of the amount of goods they could buy with that money that they are giving up to pay that insurance is much more significant than it would be in a place like Newark, New Jersey. You can see by just glancing at the map that there are a lot of variation there. Paler colors reflect cheaper cost of living – you can see a lot of those places are rural places -- and darker colors are places where it is more expensive. You don't want to be comparing premiums that are in those different places as if they are the same without making a cost-of-living adjustment. So we used county level, cost of living adjustment. These data model prices and difference predict about a 78% of overall price variation. So that is what we used to adjust our premiums.

Just to give you a sense of why this matters, these are unadjusted and adjusted premiums. In Panel A see the unadjusted premiums of 2014, 2015, and 2016. They are grouped according to whether they are federal marketplaces, state marketplaces, and if they are urban or rural. You can see if you look at them unadjusted they roughly follow the same trend and are fairly close together -- especially the urban and rural lines. There is more spread once you make the adjustments. They make the rural premiums stand out and significantly more expensive than the urban premiums – even within the same type of marketplace.

Moving on to some results.

Dr. McBride >>> One of the key findings between 2015 and 2016 that I mentioned earlier -- this graph captures both results. The way to read that is the blue bars are the premium routines in 2015 -- out of the 2014. And the orange bars are 2016 relative to 2015. The other way to read it is the vertical axis is the percent change. The horizontal axis is the population density of the rating area. There are 5 different rating areas across the US. The rating areas are combined in those cases. The best way to characterize rural versus urban was to do so by population density of the area. The most rural is on the left, 50 or fewer per square mile. And 1000 or more on the right-hand side is the most urbanized. One of the things I believe you can see -- if you look at the blue bars there wasn't much of a pattern we saw in the

percentage of rates as we saw it relates to urban and ruralness. It was high on one end and low on the other -- It looks a little like a roller coaster. We see a pattern in 2016 growth rates. It is definitely and monotonic increase that's higher in rural areas. This is overall premiums, not accounting for the subsidy. So this is the overall premium price that these plans are what the individual would pay. If you want to see how this looks in a map, this means for your geographic area. The pattern varies by state. Everybody likes to look at a map and see how their area of the country looks. I don't see a strong geographic pattern. Just to recall how we do our maps here -- the dashed out areas are urban areas the rest are the rural areas. So we really are isolating and trying to show you the rural areas.

>> This is a key signature finding chart. It summarizes what is in the charts. The relationship between the number of firms participating in a rating area and the premium growth rates. Whether you look at rural or urban, where firms are participating, we feel it's driving the high premium growth rate. Now if you look at the graph, what is characterized is the number of counties on the left hand side and then the percentage growth rate is on the right-hand side. It is a somewhat complicated graph. It is trying to correlate two parts of information. From left to right, it goes from firms to more firms. You'll see that the premium drops as the number of firms goes up. That is consistent from what we would expect from economic theory. It is better for marketplace. The important finding, if you look at the blue bars is, rural areas tend to have fewer firms. That is probably driving some of the results.

We have a couple graphs that illustrate the degree of firm participation in the marketplaces across the country and in the rating areas. The urban areas are hashed out. The darker areas have more firm participation and lighter areas have less. The way I'd view this map is that there are certain states that pop out -- Texas in particular. You tend to see that the South and the plain states have fewer firms than you'd see in the North, Northeast and the Pacific Northwest. So that gives you some clue as to what is going on. There are some states that jump out and are quite a bit different -- Texas being one of them, Kentucky and so on.

These next couple of slides are an attempt to put together two pieces of GIS data. Growth rate and firms participating. We have been able to map this out in every rating area. If you look closely you will see the number of firms operating and the shading is the average adjusted premiums, from lighter to darker, with darker being more expensive. It is adjusted by cost of living and adjusted by the things that Abby told you about. So this is sort of a level playing field in terms of price adjustments and metal level.

Moving on to the next slide. One of the things we found, when you move from 2014 to 2015 to 2016, we found a regression in the means as far as premiums. What is showing in the middle is counties arranged by decile -- counties with the lowest premium to have the highest premium. Those with the most expensive happy lowest -- have the lowest growth rate. What is relevant is that many rural counties had lower premiums in 2015. The premium -- without getting hung up on statistics, we think that insurance firms may have a whole lot of data to set their premiums. They had to quickly set up plans in 2014, they didn't know utilization and all that. By 2015, they had a little bit more information. In 2016, they know their competitors. This is typical market behavior. That is what we think is being characterized. I think it is important characterization. Where they were high, the growth rate was higher and where they were low the growth rate was lower.

Dr. Barker >>> There was one more aspect in premium analysis we wanted to cover, before we start talking about other aspects. That is the Medicaid expansion decision. This is looking at average adjusted premium growth across the three years by Medicaid expansions. That on expansion states -- non-

expansion states, in blue, tend to have higher premiums. Overall it looks like the non-expansion rate areas are pulling away from the Medicaid expansion urban category. The rural category looks like it may be in the same boat as the non-expansion. It is a little early to tell. Let's talk a little about other aspects of the plans and characteristics. Cost sharing. This is a pretty complicated chart. The top is looking at bronze plans. And what type of availability there is for deductibles and out-of-pocket maximum costs. There has been concerns that many deductibles are unaffordable to people in the marketplaces. They purchase a plan within an expensive premium and then when they go to pay them figure out they can afford to pay the deductible or the out-of-pocket costs. Looking at the top table, You can see all of the availability is between 5,000 and 6,850 is actually the max. We calculated average premiums. There tends to be a correlation. All of the math is in that corner where you are paying the highest deductible max. That may not be something they realize what they purchase a bronze plan.

When you look at silver, you are starting to see less expensive out-of-pocket maximum and you are seeing lower deductibles – depending on where you live. Not everything here would be available to any one individual – and we'll talk about that in a few slides. Looking at where the availability is, this gives a descriptive picture. If you compare blue and green, there is not a particular difference between rural and urban results.

We also did gold and platinum plans. There really aren't a lot of platinum plans out there so let me talk about the gold table. The deductible tends to be more reasonable. Most of deductibles are at or below \$3000. There is an urban and rural split.

We also want to gauge availability of good options in terms of cost sharing features. To summarize the data, which is useful to depict, it is not going to reflect the options available to an individual. We do something creative. We defined a "better" plan. It is to find one with a premium and deductible below the medium plan available in that County. So we are trying to look at the individual and say, "Is there a plan that does both?" In terms of a premium and it has a lower deductible. We wanted to assess these to the firms. This is what turns up. We have done this separately for bronze, silver and gold. You can see the bronze is relatively flat. Silver tends to increase. The gold plans tend to increase. There is opportunity for more profitability. Economic theory suggests that, in the presence of more competition that will be driven down. That is sort of explanation we are working with for this.

Now I want to change what we're talking about and focus on enrollment. It is an important piece. These results are split into regions. These are the federally facilitated marketplaces, we do not have that data separated by County. If you look Maine as the example is was 12.9% in rural and it was 11.9% in urban parts. Green is exceptionally good. It says enrollment as a percentage with an asterisk that has some small print that uses Kaiser's state level estimates with are at the county level. These are somewhat rough estimates. In Maine 71% of the market has enrolled. In the Midwest, there has been a lot of growth in rural. As a percentage of the potential market, is still not particularly high. In some places, rural does better. Looking at North Dakota, even though we marked it red, it's not a high number, but it is better than the urban numbers. Looking at the West, certain states have done well. By the way, I should point out that there are a few states that have their data in the federal enrollment file. This is the South. You can see that the enrollment is not great. Although North Carolina looks strong. We are going through these quickly. If you have questions, we can go back and address those at the end.

Dr. McBride >>> I think I will summarize the results up to these points. There have been some good questions in the chat. I will propose I go through the summary slides. Some are a work in progress. I will

open it up to questions. Just to summarize, we have talked about premium increases and how they relate to rural - urban areas. We do see progression in 2016. Generally I think we find premiums tend to be higher in rural areas and cost of living. Within the same deductible, that is true. That is not always the case. We precaution people to characterize the stories. There is not a lot of deductible and out-of-pocket maximums. The distributions look pretty similar. The better story is driven by metal level, higher in the bronze and silver plans.

I think it's intriguing to watch Medicaid Expansion. As you know, the growth rate in the States is about 35% in terms of enrollment. There are probably other factors at work. The actuarial formula again by going back to the affordable care act, it was supposed to capture variation across. We are trying to capture at the individual level and the rating level. What is not noted, is what is not captured. There is a pretty strong predictor that we have found the number of firms in the county. The more firms, the better the competition, the lower the premiums and the lower the growth rates. I think that is our summary. I would like to suggest is that we pause. I know we have two questions. Was the plan to read the questions and then we'd answer them?

****You're ready for questions, sir? ****

Dr. McBride >> Yea, let's start with questions now.

Operator >>> If you would like to ask a question, press * 1. You will be prompted to record your name. Make sure you are unmuted to record your name. To remove yourself, press * 2.

Dr. McBride >>> So should we read the question in the chat box? I'll just read the question if that's okay.

The first question came from Steve from Oklahoma.

*Might there be an effect of the provider networks available rural vs. urban? Urban areas in Oklahoma have a choice of 2 networks, from the same insurer, including a smaller/lower-cost network. While rural areas have just one network, the larger/high-cost network. Do these data compare the same insurer/same-network premiums rural vs. urban?

Dr. McBride >>> I'll take a crack at this and then Abby and jump in as well. We are looking at the rating area level, the degree of variation that you are observing will capture any aspects of the rating area itself that is not captured by the individual variation of age and status and all of that. It would definitely be the case if some of the difference is accounted for by network, providers. It would be reflected in some of the variations across premiums. I think the answer is, yes, that is part of what could be seen. If there are areas where you will see some of those issues, of fewer providers and less competition that would be reflected in the prices. Now the thought and way the rating areas were constructed in the affordable care act was trying to control for some of that but it wasn't always perfectly controlled.

Dr. Barker >>> I would add just one thing and that would be that the rating area design in Oklahoma is a MSA +1 design. Which means that the rural areas are isolated into one combined rating area. It makes the answer to the question a little different. Because basically that one rural rating area -- The premiums that are charged and offered will automatically be taking into account whatever network is in operation. I would have to think more to say more.

Dr. McBride >>> Yea, I think that is an important thing for everyone listening to percolate on. We talked about it in another brief -- that you can download from our website -- how the rating areas are set state

by state. Some states choose to use different methodologies where they drew the rating areas and not putting all the rural areas in one. A few states did a state-wide rating area like Delaware. And Florida used County by County. We have looked at it a few times. Some of the variations in premiums related to the way the rating areas are set. This is a relatively unexplored question. This is one place where state and federal policy could have a role. We did see one rating area in Colorado get merged with another one between 2015 and 2016.

The second questions came from Danielle, and she asked,

* How might cost of care be contributing to these findings? Does the analysis account for variation in cost of care, which doesn't necessarily align with cost of living?

Dr. McBride >>> That's a very good question is, Recall that the metal levels -- the way they are constructed -- goal is 90%, gold is 80%, silver is 70%, bronze is 60%. What that means is at silver level 30% of the cost is born by the individual. The the metal level itself is computed correctly, it's supposed to account for the amount of error that is paid for by the individual at the actuarial level. But of course at the individual level that will vary. We also know from the data presented, about two thirds of people sign up for silver or bronze plans. These premiums count for an assumption of how much the individuals are paying.

Dr. Barker >>> I think in the end, the fact that the actuarial value calculation is performed using national data, the simulation underlying that is national level data. It means that individual firms operating in pockets where care is more expensive, they aren't going to get that benefit of the doubt. They are not going to get a 70% silver plan. They will know that. Increasingly, as they have their own data going forward, the only choice they will have will be to raise premiums. If the question is, does the analysis count for variation? No, it doesn't. I think it highlights the fact that variation and the cost of care is meant to be one of the main freely moving variables across geography.

Dr. McBride >>> That's great. I agree. Next question was from Angela. Who was asking about the slide deck and as I understand, we will be providing it. I see that Steve is typing a questions and we are eagerly awaiting. Steven's question is,

* Any effect of whether a state has its own state-level "effective rate review" versus states, like Oklahoma, which do not do their own "rate review"?

Dr. McBride >>> Missouri has less of a rate review that won't go into effect until next year. I think this would play quite a bit. The one comment I would make -- there are federal exchanges and there are state exchanges. The federal marketplaces -- which there are 36 out of 50. They are basically negotiating the federal HHS and the rate review happens at that level. In both cases, the states can play a role. What Steve's question lays out is that. The amount they do probably plays into this quite a bit. And can play an important policy role

Dr. Barker >>> I will add, I don't think we did this with 2016 data. Kaiser has data for marketplaces are actively managing it. Any firm that wants to participate goes out and offers the plan. The state hosts that the website. We did play around with those variables. We did find some level of significance in terms of keeping premiums down with the marketplaces that are active managers. We don't really know, I don't think we were able to analyze whether -- obviously that lowers the numbers of choices for consumers and plays an adverse role.

Dr. McBride >>> If you are like me and follow the news about the bids, a lot of them create a lot of angst. Because the ones that get reported are quite high and are required to get reported and the ones that are lower are not required to be reported. If the bids are below 10% are not required to be reported. The ones you care about -- hear about are the ones that add -- ask for 50% rate increases. But those are initial bids and what we've seen is generally, the initial bid -- bid is often times chopped in half. We don't know the 2017 rates are going to look like once -- ones will look like. Will they be as high as some of the bits -- bids we have seen submitted? No. They won't be that high.

Dr. Barker >>> We don't have much more time -- time. We will advance through the slides on our upcoming work. You could contact us with questions later.

Shawnda >>> If you don't mind, Dr. Barker and Dr. McBride, Did we have any questions on the line that we have time to answer?

**Not yet. There are none. **

Dr. Barker >>> We will advance to our concluding slides. The framework we are using is an economist's lens. The nature of a competitive marketplace is to be dynamic. It will have winners and losers. It is meant to be efficient. This should reflect the prices of cost. People will make changes. In nature of insurance, as a product, is to pull risk. It is to overcome adverse selection. The combination of a market structure, with the incentives of insurance, has the potential to fail in places with a small population. The prices can't all the way adjust to the uneven risk. Certain companies have to be worried. There are high costs they have to absorb. That leads to are policy solutions.

Dr. McBride >>> There is a rural - urban story we are uncovering. Are there any policy tools that could be used? We don't advocate for any of these. How that rating areas are set thinking about networks and how they relate to areas are a key one. States do have the ability of changing their rating areas. As data becomes available, it can affect data calculations, as we observed. We did not talk about the multistate plan in the affordable care act. They do exist. They are not as widespread as they were purposed to be in the law. This might be something that could mitigate the lack of competition. The risk sharing and reinsurance that can protect some of the firms against the small population areas, that is something that could be looked at from a policy level. We are at 1:00 and we will end the presentation. We appreciate the questions and your attention. You can follow up with Abigail and I as well.

Dr. Barker >>> Thank you.

** Thank you. That does conclude today's call. You may disconnect at this time. **