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Moderator: Okay and we are almost at the top of the hour so at this time I want to introduce our speakers so that we can get started on time. Speaking first we have Dr. Leslie Hausmann, she is a Core Investigator at the Center for Health Equity Research and Promotion located at the VA Pittsburgh Healthcare System and an Assistant Professor of Medicine at the University of Pittsburgh. Speaking second we have Doctoral Candidate Susan Hernandez, she is a Research Associate at the Seattle Center of Innovation for Veteran-Centered and Value-Driven Care located at VA Puget Sound Healthcare System and a Ph.D. Candidate in the Department of Health Services at the School of Public Health at the University of Washington. So we are very grateful to our two presenters for speaking to us today.

At this time, Dr. Hausmann are you ready to share your screen?

Dr. Leslie Hausmann: I am.

Moderator: Excellent you should see that pop up not. Leslie did you see that, there you go, perfect we are ready to go.

Dr. Leslie Hausmann: Great, thank you so much. Good morning and good afternoon, thank you for everyone in attendance today. I am going to be talking about some work I have done looking at racial and ethnic differences in Veteran healthcare experiences. To give you an overview, hold on one second, I will try this again, there you go. To give you an overview I am going to start out providing some background on why we should even study racial and ethnic differences in VA patient experiences. That is going to be followed by a quick tutorial on what it means to be within versus between facility difference in patient experiences. Then I am going to wrap up by sharing with you some data from one of my studies looking at racial and ethnic differences in VA patient experiences.

Before getting too far into it, I have a few poll questions and I believe Molly at this point you put that on the screen.

Molly: So the poll question is up on your screen now attendees. So the question is - Do you think patients of different races and ethnicities have different types of experiences in the VA Healthcare System? The answer options are – Yes; No; or Unsure. It looks like half of our audience already voted and there seems to be a resounding decision or consensus so I will go ahead and close that now and share the results. Looks like we have a majority eighty-two percent saying Yes, six percent saying No and twelve percent saying Unsure.

Dr. Leslie Hausmann: Well thank you for weighing in on that first question. My second question is very similar to the first with a slight difference. This question which Molly will show in just one moment is - Do you think patients of different races and ethnicities have different types of experiences within your VA facility as opposed to just the VA healthcare system nationally?

Molly: Thank you again we have about half of our audience vote already and we do seem to again have a large consensus. I will go ahead and close that and share the results. Again, exact same numbers – eight-two percent say Yes; six percent say No and twelve percent say Unsure. So thank you those respondents and we will go ahead and move back to your slides.

Dr. Leslie Hausmann: Thank you everyone for weighing in and I did ask about VA in general versus VA in your facility or differences in your VA felicity specifically. Hopefully over the course of my presentation it will become clear why I asked such a similar question in two different ways.

Now moving into the background, I just want to speak for a minute on why we should study ethnic and racial differences in VA patient experiences. Patient-reported health care experiences are an important dimension of health care quality and are associated with lots of desirable health behaviors and positive health outcomes. VA regularly collects data on patient experiences and uses this data to guide quality improvement efforts. In taking a look at how those experiences of patients from different racial and ethnic groups can inform efforts. [Molly I am getting some typing].

Molly: I am sorry about that, that was me.

Dr. Leslie Hausmann: I was not sure if you was you or another person on the phones. Sorry to interrupt myself. Okay moving back to the last point on my slide there, comparing experiences of patient from different racial and ethnic groups can inform efforts to address disparities when they are identified. However there are some limitations of past work examining racial and ethnic differences in VA patient experiences. One of those main differences is that some of the prior studies have focused only on Black/white difference or minority/white comparisons without examining outcomes for specific minority groups. So this may mask differences that are unique to each specific racial group other than Black individuals. Prior work is also limited in that it typically uses mean ratings of patient experiences or focuses exclusively on the proportion of highly positive ratings. While these two analytic strategies are often valid and meaningful, due to differences in the way patients from various demographic groups use response scales, using the mean or only focusing on the highly positive ratings can mask important differences that occur across groups.

Finally a major limitation of past work in this area is that it has not distinguished whether racial and ethnic differences are occurring within facilities or between medical facilities and this has important implications for the type of intervention that the VA might pursue to alleviate disparities based on whether they are occurring within or between facilities.

This brings me to the tutorial aspect of my presentation where I am going to quickly go through everything and more than you ever wanted to know about within and between facility differences. Starting with what are “within facility” differences. Basically what I am going to do here is focus on some, [having technical difficulties here, bear with me one second]. Okay so “within facility” differences are differences that occur when patients od different racial groups have different experiences when they are getting care at the same facility. So to illustrate what I mean by this, I have drawn up some fictitious data illustrating different patterns of patient experiences that can be found at various facilities. All my examples in the next few slides are based on one hundred patients, so a sample of one hundred patients from various facilities and the racial distribution is set to be similar it is not exact, but similar to the national distribution of African American patients across VA. So I set the fictitious example to have ninety percent White patients at these facilities and ten percent Black patients.

Let us take a look at Facility Number One. In this scenario what you are seeing here is that the overall, there are generally positive experiences being reported. This is the same across White patients at that facility and Black patients at that facility. In both the White group and the Black group we have ninety percent positive and ten percent negative. This is actually an instance where there are no “within facility” race differences.

Now let us take a look at Facility Number Two. Here we also have mostly orange which is in my color scheme is a good thing, this means that most patients are pretty happy reporting positive experiences. However, the distribution or ratio of positive to negative experiences remains ninety percent positive and ten percent in our White group. When you look at Black subgroup you have fifty/fifty ratio. So fifty percent of our Black individuals at Facility Two are reporting positive while the remaining are reporting negative experiences. So this would be an example where while overall things are looking okay, at this facility, the individuals who happen to be in the Black racial group are reporting higher rates of negative experiences. This would be an instance of a “within facility” difference.

How would this difference look if we changed the overall races of positive experiences so that overall things are not as positive as they were in the first facility. So for this example, the overall race of positive experience is it only fifty percent across both White and African American subgroups. Again, Facility Number Three less positive experiences overall, but still no “within facility” difference.

Another scenario illustrating what a “within facility” difference looks like is shown here. Facility Number Four again we have the fifty/fifty split on positive and negative experiences for White individuals whereas for our Black individuals we have an eighty/twenty split. So this is another instance of where the negative experiences among one race group are more common than among the other race group.

The question is now – what are “between facility” differences. “Between facility” differences occur when the overall rate of positive experiences are different across two facilities. So going back to Facility One, this should look familiar, Facility One was where most people were positive. I showed the race breakdown overall to illustrate or the race breakdown to illustrate that within each race group you see the same pattern and overall you have ninety percent of this patient population at Facility One generally happy. Facility Three things are not as good only a fifty/fifty split between positive and negative experiences but again these are not race specific it is just the facility overall is patients at Facility Three are less satisfied overall than patients at Facility One. So this is an illustration of a “between facility” difference. The connection between “within” and “between” facility differences and their association with race differences, becomes important when you think about the fact that patients of different races are not equally distributed across all VA facilities. So rather than being equal distribution across all VA facilities, the proportion of African American and Hispanic patients in our VA centers often mirrors the demographic makeup of the surrounding communities within which those Veterans live.

As you can see here from the 2010 Consensus we have a high concentration of African Americans in the south and a little bit out in California. For Hispanics we see a higher concentration of Hispanics in these regions in the south and west. How does this all tie back to “between facility” differences. “Between facility” race differences in patient experiences can happen if most of our White Veterans are attending facilities that look like this. Yes things are pretty good overall, there might not be a difference within race, but you can see that a lot of White individuals are happy where the proportion is the same among your Black individuals but it is numerically a smaller number having positive experiences just because there are fewer Black patients going to that facility. On the flip side if most of our Black patients are ending up in facilities like this then you can see that numerically we have more Black patients getting negative experiences. Yes there are some White individuals, but if you take a step back in the whole national level, if most White individuals are going to facilities like this and most Black patients are ending up in facilities like this, as a nation we will see Black/White differences in overall ratings of care.

Alright so with that tutorial now behind us, what does the data tell us about race and ethnic distributions of patient experiences across the VA? I am going to share with you results from a study where we compared the rates of negative and positive VA outpatient healthcare experiences across four racial ethnic groups. In my example I focus on just negative and positive for Black/White but in my actual study I broke it down by non-Hispanic White; non-Hispanic Black; Hispanic and Other. I also conducted analyses to determine whether these race differences are occurring within or between VA facilities.

We used patient experience data from the outpatient survey of healthcare experiences of those patients also known as the SHEP from Fiscal Year 2010. For those of you who may not be familiar with SHEP, this is mail-based survey conducted by the VA Office of Analytics and Business Intelligence. It is based on an instrument that is called the Consumer Assessment of Healthcare Providers and Systems health plan survey. This is a survey that has been validated and is widely used outside the VA and the VA uses a version that hopefully resembles the version used outside the VA with a few tweaks to make it particularly useful to the VA as an organization. For the SHEP they randomly sample active outpatients from all major VA Medical Centers as well as Community-Based Outpatient Clinics and subsidiary facilities for outpatient services are delivered and they do these samples every month.

The demand of healthcare experience is covered in the Fiscal Year 2010 version of the SHEP included getting needed care; getting care quickly; use of pharmacy services; how well doctors and nurses communicate; shared decision making. And then some overall ratings of all the healthcare patients received their personal doctor or nurse in overall ratings of some specialists assuming the patients received some kind of care from a specialist during the year in which they were surveyed.

As I mentioned before we did not simply look at mean ratings or positive ratings, we actually categorized each person’s response into a negative, moderate or positive experience category using the points here. In our independent variables in the analyses included self-reported respondent race and ethnicity from the SHEP. We categorized each person into the four groups I mentioned earlier. I just want to state that we had a strong desire to look at as many racial groups as the data would allow. Unfortunately the racial groups listed here: Asian, Native Hawaiian, American Indian, other, and multi-race, these groups were too small numerically to include by themselves. Rather than just missing them and excluding them we combined them into a very heterogeneous other racial category to see how their experiences compared. Then to get at the “between facility” race differences, we calculated the racial and ethnic composition of patient populations at respondents’ healthcare facilities. So for this calculation we looked at the proportion of patients who received outpatient care in each of the facilities from each of the racial and ethnic groups during Fiscal Year 2010.

We included a number of covariates in our adjusted analyses that all of these have been shown to be associated with patient experiences so we controlled for them. Our analyses we will pick unadjusted rates as Negative, Moderate and Positive experiences for all domains across the four race and ethnic groups. Then we did some hierarchical modelling to partition the racial differences into whether they are happening “within facilities” or “between facilities”.

Here is how we derived our analytic samples, the take home point of this slide is that we have just over two hundred thousand patients in our analytic sample. The sample is summarized here, our minority patents were higher proportions of females; they were somewhat younger; they had poor health in our White individuals. They were also more likely to live in urban areas and to receive care at major VAMCs as opposed to the CBOC or subsidiary facilities.

Here you can see the overall race not broken down by race but just for the national sample overall across all of the domains we studied. I am putting this up here mostly to just illustrate that we do have variation across the domains in overall levels of positive and negative experiences which most of the least positive experiences are being reported for getting needed care and getting care quickly as well as the overall health rating. That is just nationally as a group. We are more interested in looking at how this breaks down by race and ethnic groups and I am going to be breezing through a few slides here showing a lot of numbers, but what I want you to do is instead of getting mired in the details of the numbers is to take a look at the pattern.

These are our three access related domains. You can see that the largest percentage of positive experiences are reported by our White participants with the fewest being reported with having few negative experiences in that group. However, our other race group has the least positive and most negative experiences of all four race and ethnic categories and the Black and Hispanic respondents fall somewhere in the middle because you can see it kind of declined. You see that across all of our access domains; you see a similar but less pronounced pattern among the communication domains, just communication in general and shared decision-making. Then finally you see again similar pattern in our overall ratings where the other group is having the most negative and least positive experiences in our White group reporting the most positive and the least negative.

How does this look when we break down the “within” and “between” components. Again I am going to be breezing through a lot of numbers but what I want to do is focus on the pattern. I am.

Molly: Sorry hold on I will get that person muted.

Dr. Leslie Hausmann: Thank you.

Molly: There you go.

Dr. Leslie Hausmann: Thank you. So for the next few slides the color codes mean: the dark blue and the lighter, it looks blue on my screen I am not sure what it looks like for those on the call, but these two colors are going to highlight differences that favor the minority group. Meaning the minority group is actually reporting less negative or more positive experiences then the majority White group. Then these bottom colors the dark gray and lighter gray are significant differences that are factoring Whites. So White individuals are reporting more positive and less negative experiences then the minority group. This slide focuses only on the Black/White comparisons and so focusing on the negative end of the scale and the “within facility” differences. This is comparing rates of negative experiences between Black and White individuals located within the same facility. You can see there is not a lot going on there, not too many differences. When you do not get the “between facility” differences however, you see a very clear pattern. Facilities where there are higher concentrations of Black individuals, patients of all races are reporting more negative experiences at those facilities. When you look at the positive end of the scale, again, most differences across the domains were not significant when comparing “within facilities” but “between facilities” you can see again that facilities that are serving higher concentrations of Black individuals, you are seeing lower positive readings among all patients at those facilities. So this suggests that we do see race differences between Blacks and Whites and it is in large part due to where they are receiving care.

Here again I am just jumping right to the full Hispanic/White recipient summary. And again, when you look at the “within facility” not too much going on in the negative end. Positive end we see a counter-intuitive set of findings where our Hispanic individuals are actually reporting more positive experiences across most of the means compared to White individuals at that same facilities. An exception to this would be the pharmacy services where it still was negative for our Hispanic respondents. Again, “between facility” differences all show the same pattern where higher levels of facilities where there are more Hispanic patients, patients are reporting more negative and less positive experiences with care.

One more data intensive slide shows a completely different set of results or pattern of results for our other White comparison. When you look at that heterogeneous Other race in ethnic group you can see zero between facility differences for that group but very stark and consistent “within facility” differences. This demonstrates that patients “within facilities”, Other race patients are reporting less positive and more negative experiences than Whites at this same exact facility.

Alright, briefly conclusions before I turn it over to the second speaker, there are significant racial and ethnic differences in VA outpatient healthcare experiences with unique patterns for each minority group. Most of the Black/White differences favor Whites and occur between facilities. For Hispanics “between facility” differences also favor Whites, but we see some “within facility” differences that are actually favoring Hispanic. Then for our Other racial and ethnic respondents “within facility” differences consistently favor Whites.

The implications of this are that the VA should be reporting patient healthcare experiences by individual racial and ethnic groups. Lumping all the minority patients into one group may be masking various different patterns of patient healthcare experiences. Reports need to take into account “within facility” and “between facility” differences because as the previous slide illustrates the patterns are very different across the different racial groups as far as where these differences are taking place.

Finally improvement efforts should target minority serving VA facilities as well as some of the specific domains where we saw the largest differences.

This is my last slide and I just wanted to acknowledge the funding and just to be very clear that these are my views only. At that I look forward to questions at the end of the session and am happy to turn it over to Dr. Hernandez.

Molly: Thank you and I will turn it over to you for your screen now so you should see that pop up. Susan, there we go. Perfect.

Susan Hernandez: I am not yet Dr. Hernandez but hopefully this summer. So thank you again for joining us and thank you for giving us that great presentation about “within” and “between” facility differences because I think that will come in really handy as I go through the presentation.

This project investigates whether patient aligned care teams is implemented differently by facilities in relation to the percent of minorities that are then served at a facility. I will go ahead and talk more about PACT and the impact on the patient progress and bring it back a little bit later in the presentation.

First I will start off by providing some general motivation behind the project; provide some general background and then I will go into the methods, results, limitations, acknowledgements and end with questions and comments for both presentations.

A little bit of background by disparities in the U.S. In 2002, the Institute of Medicine reports unequal treatment found significant variations in the rates of medical procedures by race and ethnicity even when ensuring status, income, age and severity of conditions were comparable. These differences represent inequity in healthcare delivery or healthcare disparities. This research indicates that minorities are less likely to receive routine medical procures and experience a lower quality of health services. This comprehensive report reframes healthcare disparities as a quality of care issue amenable to intervention. One hypothesis is that healthcare disparities are produced as a result of racial ethnic minorities refusing care at a small number of low quality facilities. Importantly healthcare in the U.S. was historically segregated. Medicare and Medicaid program in 1966 gave \_\_\_\_\_ [00:26:57] to rulings and laws against segregation by taking away a so-called choice clause and their enforcement via site visits and the consequence of losing funding. However, the fact of segregation continues today with a few providers caring for the majority of minority patients.

Healthcare disparities are also prevalent in the VA. These disparities have been demonstrated despite being a healthcare system where financial barriers to receiving care are minimized. We show disparities in the VA exist just across a wide-range of clinical areas and service types. There are a variety of likely root cause for disparities also including the differences in the quality of care at facilities that commit to different racial groups. Racial patterns of healthcare use in the VA are similar to patterns in the private sector, a small number of facilities care for the majority of minority patients. In some cases VA medical centers that disproportionately serve minority Veterans have fewer available services or delivery lower quality of care overall the medical center serving predominantly White Veterans. However, this potential source of disparities remain somewhat underscored. It should be noted that there are also many studies that have demonstrated disparities within a single VA medical Center and this suggest that system level factors are unlikely to explain all of the observed disparities. This also suggests that triating [ph] lower performing facilities for quality improvement interventions might yield the highest impacts for reducing disparities in healthcare for minority Veterans.

Before we move on to the rest of the presentation I just want to give a quick audience poll with two questions. The first…

Molly: We have that up on the screen it is – are you familiar with the patient centered medical home and the answers are Yes or No. We have had the majority of our audience vote so I will go ahead and close the poll now and share the results. It looks like the majority eighty-one percent say Yes and nineteen percent report No.

We will jump right in to the next one, which is – are you familiar with Patient Aligned Care Teams known as PACT? Again your answer options are Yes or No. Looks about half of our audience has voted and we will give people just a few more seconds. Nice responsive group today thank you. Okay so I will go ahead and close the poll and share those results. Looks like again the majority eighty-seven percent report Yes and thirteen percent report No. Thank you those respondents and we are back on your slide.

Susan Hernandez: Great, I will just give a little bit of background on the patient centered medical home and its history and past so we are all on the same page. The patients on medical home are PCMH and it is not a new concept. The American Academy of Pediatrics first viewed the term medical home to describe a central location where a child’s pediatric medical records. It really focused on children with special healthcare needs. In adult medicine the medical home concept was first mentioned by Grumbach and Bodenheimer in the 2002 *JAMA* article as a way to redesign the endangered primary care home. Their description of the medical home or the primary care home was very similar to Barbara Spazio’s [ph] definition of primary care. In 2007 the Joint Principles were released by four primary care specialty societies outlining and defining acute characteristics of the home. However, a systematic review of the peer review literature on the descriptions of the medical home found that there is much heterogeneity and their definition really depends on the perceptive. However there were some common elements to be found across these definitions and that included whole patient care instead of disease focused; enhanced provider patient communications; prevention and health promotion and patient provider shared decision-making. However each medical home is often tailored to the unique needs of the population that it serves.

In 2010 the VA simultaneously rolled out Patient Aligned Care Teams or PACT to over nine hundred primary care facilities. PACT is a patient centered medical home model of care that focuses specifically around team-based care. The unique features of the VA relative to other healthcare systems and other models of the medical home are that while other models have focused on adopting information systems, population management tools and tying payments of some to support this model of care, the VA already has these in place as a 1990 transformation.

The VA also implemented a robust EMR system because of its population management and quality improvement. In additional while other models have discussed the adoption of team care, the VA exclusively defines members of a team and sets specific staffing ratios.

Since off the shelf measures would not capture the unique features of PACT in a 2013 qualitative study also noted that PACT implementation was not uniform across the VA and there was a need to really measure PACT implementation nationally. The national evaluation team developed an index to measure progress towards PACT implementation and they called it the PACT Implementation Progress Index of Pi2. The *JAMA* article listed at the bottom of the slide has details on Pi2 but I will go briefly through it since I use it as the main outcome in this study.

So the researchers identified the basic domains of PACT and identified measures that PACT represented these domains. The goal was to broaden measurement of PACT by combining patient provider and administrative data. This slide displays the eight domains of the PACT model and the sources of data for each of these domains the number of items within each of these domains.

There were three main data sources and we used a CAHPS-PCMH survey and the PACT Primary Care Personnel Survey, which was used primarily for the team-based care domain taken from the Corporate Data Warehouse, which is administrated, in clinical data.

For each individual item of a domain we generated a V-score or a standardized facility level response which we calculated by subtracting the national means from the facility level mean and then dividing by the standard deviation of all facilities with standardized individual items to facility combining different data sources since they were on different scales. We then created domain scores for each facility by averaging the standardized means of available items in each domain. So Pi2 is the count of the domain scores in the top quartile minus the number of domains in the bottom quartile. Since there were eight domains scores range from eight, which was the best to negative eight, which was the worst. For example if a site had three domains in the top quartile and one domain in the bottom quartile their Pi2 score would be two. Sites with higher implementation or scores of five or greater relative to low implementation sites or sites with negative five or lower scores had higher patient satisfaction, lower staff burnout, higher proportions of Veterans needing criteria on multiple measures of quality and modestly lower admissions for ambulatory care sensitive hospital conditions. Two years after PACT roll out evaluations indicate implementation has not been uniform across the nine hundred primary care facilities and high levels of implementation are associated with important patient and provider outcomes.

We know that minorities are concentrated among a relatively few deluxe facilities heterogeneous roll out of PACT could potentially close the working disparities in the VA. The goal of the study was to determine whether PACT was implemented less effectively in facilities serving higher proportions of minority Veterans.

This was an observational facility level analysis of VA hospital based and community based primary care facilities, it is a cross sectional analysis of Pi2. Facilities were characterized as low; medium and high percent minority based on the proportion of minorities that are comprising their patient population. These cut-offs represent the twenty-fifth and seventy-fifth percentile. We categorized minorities as Veterans that indicated they were non-White or non-Other. For each facility we used an overall implementation score and a score for each of these domains and facilities with fewer than a hundred patients were excluded from the analysis.

The statistical analysis to test whether overall PACT implementation differed by facility based on the percent of minority that are inside a facility, these are both linear and ordered logit models. For the unadjusted and adjusted linear models these weighted least squared estimators using the number of patients at a facility whose robust standard errors to adjust for heteroskedasticity. The ordered logit models we categorized Pi2 scores into five levels of implementation. We estimated average adjusted predicted probabilities for each level of Pi2. For each level of Pi2 we also calculate average marginal predicted probabilities. What struck me was this marginal represents the change or the difference in the predicted probabilities for each level of Pi2 between the reference group, which is low minority facilities, and medium and high minority facilities.

Differences in the implantation of specific domains we estimated similar linear models with individual domain scores as the dependent variable. For the team-based domain we included only facilities with more than five respondents and this significantly reduced our sample size. In all adjusted models we controlled for mean age, proportion female and mean Elixhauser because these factors are also associated with differences in PACTs responses and that was a component of Pi2.

We found that ninety-eight percent of all minorities received care at medium and high percent minority facilities. High minority facilities cared for sixty-nine percent of all minority Veterans and these same facilities cared for thirty-seven percent of all Veterans using VA for healthcare.

Compared to low minority facilities medium and high minority facilities had younger aged populations, more females and were larger. These facilities do not differentiate from the average comorbidity as measured by the Elixhauser.

Using the test per proportion we found that 3.5% of minorities versus 5.2% of White Veterans received care at high implementation facilities and we also found that about eleven percent of minorities received eight percent of White Veterans acute care at low implementation facilities. In our adjusted analyses of the overall Pi2 score using the linear model, we found that medium and high minority facilities had lower Pi2 scores relative to low minority facilities. These differences mean that on average, medium and high minority facilities had approximately one domain in the lower quartile or one less domain in the higher quartile than did low minority facilities.

In the ordered logit analysis relative to low minority facilities medium and high minority facilities had a lower probability of being at top levels of Pi2  and a higher probability of being in the bottom levels of Pi2. These differences in probability range from -8.3 to 7.5 percentage points. I am sorry I skipped ahead. Medium and high percent minority facilities scored four out of eight domains lower than low minority facilities and medium and high minority facilities had lower domain scores for care coordination, comprehensiveness and self-management. Medium minority facilities had worst domain scores for patient centered care and communications. High minority facilities had low worst domain scores for access compared to low minority facilities.

There are differences in facility Pi2 are significant but clinical significance to minority Veterans is not clear. However, in a previously I had mentioned at the beginning of the talk we found that significant differences in clinical markers of care are associated with Pi2. Medium and high minority falsities scored lower scores in two out of four domains compared to items derived only from the CAHPS-PCMH patients experience survey. As Dr. Hoffman’s research stated earlier she also found differences in patient experience by Blacks and Hispanics relative to White Veterans. They also found differences in patient experience more often caused between facilities rather than within facilities differences. Veterans at a particular facility were more likely to report similar experiences.

Importantly the present study we found lower domain scores in access and care coordination. There were a combination of administrative and patient experience data. Although we did not find differences in the team-based care domain that derives information only from the personnel survey.

Finally studies investigating the role of site of care in the VA and disparities paints a mixed picture. Many find the disparities are often explained more by the within facility differences and between facility differences in the VA. We mean that is variation care at particular facility by providers might be causing some of the disparities. Other studies support the “between facility” role of disparities meaning variation across facilities causing disparities. In the present study provides some support for the latter hypothesis.

This study has limitations. First the cut off points for percent minority of a facility were somewhat arbitrary. Other studies looking at the composition of a facility and disparities have also used different cut offs and most often they chose a cut off based on the proportion of minorities represented in the study population. In the present study we used the twenty-fifth and seventy-fifth percentiles because it allows for adequate numbers of facilities in each category and also allows for an adequate number of minority patients in each category.

Second the team-based care domain included only three hundred and twenty sites total response rate of the personnel survey so we are not able to make any assessment about the team-based care domain for a large proportion of facilities in our study.

There is a Pi2 score is a cofractional measure with low rate by comparison. So we are unable to affect change in Pi2. But possibly even though the facilities had lower levels of implementation they may have experienced the most changes in these domains but were not able to affect.

This is just a summary of the results. Sites with higher percentages of minority patients had not perfected PACT implementation. Medium and high minority facilities overlap the lower scores in three domains. Medium and high minority facilities had a greater probability of being a low implementer and a lower probability of being a high implementer. However future research really is needed to understand the relationship between racial ethnic composition of a facility and other characteristics that may improve PACT implementation and to determine whether less effective PACT implemental affects clinical and patient centered outcomes for minority Veterans.

I would just like to thank my Dissertation Committee and the National PACT Evaluation Team and others who have helped me during my Ph.D. and I would also like to acknowledge funding the research was supported by R-36 and teaching grants and the data came from the National PACT Evaluation Center. There are some disclaimers and a list of references if you are interested and now if there are some questions and comments.

Molly: Thank you very much. We do have time for Q&A for those of you who joined us after the top of the hour to submit your question or comment just use the question section of the Go To Webinar Dashboard on the right hand side of your screen. To open it up just hit the plus sign next to the word questions and then you can type it in to the box and press submit. If it is for one of our particular presenters please specify who the question is being asked to. The first question this came in Dr. Hausmann just after your portion so I am assuming it is for you – can this data be combined with radians of quality by facility and by ethnic/racial makeup of providers?

Dr. Leslie Hausmann: That is a great question. Absolutely, quality is defined in a lot of different ways and but there are definitions of quality of care that the VA tracks. Those analyses can be done, I have not done to many of those analyses myself. Then there was another question linked to the provider make up and in the analyses this did not make the cut for the final paper that got published based on the findings that I reported in today’s webinar. Through the course of running those analyses we explored a number of facility characteristics to determine whether there were facility characteristics that could explain or reduce the rate differences that we were observing in patient experiences. What we found was that there were a number of facility characteristics that were associated with overall levels of patient ratings as patient experiences but none of those characteristics could explain the rate differences that we were seeing. So we ultimately had to cut those from the final analyses that we reported. But in exploring some of those facility characteristics, one of the things we looked at did include the race distribution of nurses as well as doctors. We looked at them separately because the racial distribution of nurses and doctors is very different. This is too fuzzy for me to state with any real confidence but one of the findings that I do recall that drove our decision to cut the facility level of rate distribution of providers from our final analysis was that the distribution of nurses at facilities was almost completely confounded with the distribution of patients. Patients who are at facilities with high levels of minority patients also tend to have high numbers of minority nurses. It is a little bit of a different story for providers but in the end it was very difficult to include both provider rate information and patient rate information in the same models because there was so much overlap. Hopefully that answered the question, if I did not quite get to it, I am always available by email for follow up or feel free to type in another follow up question and I can get to it if there is enough time in the Q&A.

Molly: Thank you. This next question is for Susan. Is the information presented published anywhere yet?

Susan Hernandez: No, there is a manuscript being prepared currently and it is making the final rounds before submission. So it should be out hopefully soon.

Molly: Thank you. This came in Leslie just after your portion. How does age factor into some of these results? For example Whites are probably the oldest group and may have more contact with the VA for example because they have more health issues. This could also affect the type of care that Veterans receive. Whites or Black may have different use of primary care versus mental health care, which may also impact the satisfaction.

Dr. Leslie Hausmann: That is another great question and I am glad to whoever brought that up because age is a very strong predictor of patient reported experiences. The nature of that relationship is often the case that older patients report belter experiences. They just as group reporting more positive and fewer negative experiences and the person who wrote the question is absolutely right that race and age are often confounded in the sense that our minority Veterans tend to be younger as a group. Age is always a very important variable to adjust for when you are trying to understand race differences. In the unadjusted model we did not take into account race but in all of our adjusted models or excuse me we did not take into account anything other than race in our unadjusted comparisons. However, in all of our adjusted comparisons we did take into account age so none of the race differences here are due to race differences in age. The question also brought up patient utilization, which is also something that utilization is higher among older Veterans and we know that older Veterans report better experiences with care. We also know that higher utilizers report better experiences with care typically. We did not have a measure of utilization acceptable to use in the analyses I presented. That may be something that could be something to explore in the future. The tricky part is utilization introduces an analytic challenge in the sense that you do not know if the people who come to the VA have a great experience so they come back to the VA, those might be the people who are high utilizers and report good care. You might lose people who come in, have a bad experience and then decide never to come back. But it could be patients who have high health needs, their needs are being met and they are super excited and happy so it is really hard to know what the causal nature, whether utilization is driving patient reports of their experiences or the experiences are driving differences in utilization. That is a very difficult thing to take apart and we did not do any of that in the analyses I described.

Molly: Thank you. This question came in Susan just after your portion but I am not sure who it is directed at. This is very interesting previous research by Trivedi in Washington has indicated that disparities are more explained by “within facility” differences. Both of your analyses seem pretty substantially divergent from this previous work. Any further thoughts?

Susan Hernandez: I think I am somewhat familiar with Trivedi’s work. I also heard him present during some conferences and I think he also points out that it really depends on the measure that you are looking at. For something’s for some clinical measures within there are more “within facility” differences than there are across facility and that might be due to quality improvement initiatives that have standardized care across the VA and in some areas where there is not a lot of attention focused on that particular area there might be more variation in care across facilities. This is the findings that we both presented really focus on patient experience and so I think the field is still finding ways to improve patient experience. Leslie do you have any other thoughts?

Dr. Leslie Hausmann: That was a great summary. You are absolutely right that Trivedi’s work focuses entirely on something that came up in one of the earlier questions, which is quality. Their paper focused entirely on different performance measures that are commonly considered to be quality metrics and that is very true that the findings from that analyses were that there were some rate differences but only for some of the quality metrics and those differences were more within versus between facilities. I think the measure matters and there may be different things going on based on whether you are focusing on a clinical process measure or a patient perception of the care that they are being given.

Molly: Thank you both for those responses. The next question – Susan when you say PACT implementation how much of that Pi2 number is following ideal PACT role make up meaning one provider, one RN, one clerk, etcetera.

Susan Hernandez: The team-based care domain was measured the team-based implementation of PACT. In those measures one of the questions was is the staffing ratio is there a 3:1 staffing ratio so for every provider there are three other staff members. That was part of the measure, it was not the only measure that was included in the Pi2 index. We did not find differences in that team-based care domain. I hope that answers your question.

Molly: Thank you they are always welcomed to write in for further clarification. The last question we have pending, this is also for you Susan. I thought in the results slide that there was a significant result for high minority facilities involving the access domain. What were the conclusions involving that domain? Also what does comprehensiveness refer to?

Susan Hernandez: The access domain was a combination of patient experience rate and also administrative data. I think there was about an equal number of items from each of the two data sources and they included wait time and it also included the patient perspective like how did you get care when you needed those types of questions. The *JAMA* article that I listed at the bottom if you were really interested in that specific time has a supplemental part that you can access that has all of the fifty-three items listed and average tour across the VA. I think that would probably be the best way for you to get the specific information that you are looking for.

I think the other question was – what is patient centered care and communication? That was trying to capture more like home to sick, patient centered care approach so those items came only from the CAHPS-PCMH survey. It asks questions about more comprehensiveness like did the provider ask you about other things going on in your care.

Molly: Thank you. We did have just one more question come in also for you Susan. Where can I learn more about Pi2 and yes you answered the previous question, I asked because of research and prior cyberseminar presentations by Ian Crawford out of Iowa on PACT social network analysis. The question is – where can I learn more about Pi2.

Susan Hernandez: The *JAMA* article I listed at the bottom talks about the validation of Pi2 and it has a lot of detail about the items that are in Pi2. But if you are interested in using Pi2 for research purposes I think that there is a work group that you could probably join to get access to Pi2. If you email me I can put you in contact with those people.

Molly: Great. Well that is the remaining question so I would like to give each of you the opportunity to make any concluding comments if you would like to, except one more question just came in. Would you consider looking at sex and gender differences as well? I am not sure who that one is for you can each take a shot if you would like.

Dr. Leslie Hausmann: This is Leslie. I am not sure who that is for either. But we did not focus on gender differences in the patient experience analyses I described earlier but we did focus, we explored gender issues and there really were not a whole of clear patterns of gender differences in patient experiences in the outpatient setting so we did not make it a focus of the analysis that got published. However, there were clear gender differences in the inpatient patient experiences and so there is a paper that was published I think it was last year in the *Journal of Medical Care* and I was the first author so if you look it up or if you want to email me I can provide the citation for that. But we did focus on gender differences at least in the inpatient experiences.

Molly: Thank you Susan would you like to contribute?

Susan Hernandez: The analysis I presented adjust for the proportion of females at a facility, it does not look at disparities by gender. However, the distribution of male and females by minorities that are in is different than it is for White Veterans. That would be an interesting question, this particular analysis was not looking at that.

Molly: Thank you. Well as I mentioned I would like to give either of you the opportunity to make any concluding comments if you would like. Leslie we can start with you.

Dr. Leslie Hausmann: I do not really have anything else to say other than thank you for the opportunity to share this work with everybody on today’s call. Please feel free to contact me if you have further questions about what I presented.

Molly: Thank you, Susan.

Susan Hernandez: I would also like to thank you for the opportunity to present today and I think the work that I presented really raises more questions than it does answer questions. I am really looking forward to the future research that kind of delves more into reasons why there are differences at the facility level and what we can do to improve these facilities.

Molly: Excellent. I would like to thank all of our attendees for joining us and of course thank both of you for lending your expertise to the field. Please do check back with us every third Wednesday of the month at noon eastern, we do have a recurring PACT cyberseminar every month and also for our attendees as you exit out of today’s session please take just a moment to fill out the feedback survey that will pop up on your screen. It is just a few questions and we do look at your responses carefully to help decide which topics of cyberseminars to help support. Thank you once again to everyone, and have a wonderful day.