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Moderator: Speaking first we will have Dr. Christian Helfrrich, he is a Core Investigator at the Health Services Research and Development at VA Puget Sound. Following him will be Dr. David Mohr, he is at the Center for Healthcare Organization and Implementation Research here at VA Boston Healthcare System. Finally, we will have Dr. Ryan Derickson, he is a Health Systems Specialist at the VHA National Center for Organization Development. We are very happy to have our speakers with us today and we are going to go ahead and get started here. Christian I will turn it over to you.

Dr. Christian Helfrich: Great thank you so much Molly. Good morning everybody and this is part of the QUERI Cyberseminar series “Quality Enhancement Research Initiative”. This is a health services research and development collaboration with the clinical operations. The QUERI Program was renewed last year, and a bunch of new programs funded and we started having some conversations about collaborating across these new QUERI programs. And one of the topics that came up was – The Use of Employee Survey Data and the idea of leveraging some of the extraordinary employee survey data that the VA already collects and right at the top of the list of that existing great resource is this survey called “The All Employee Survey”. What we wanted to talk with you about this morning is the ability to use The All Employee Survey and an example would be a collaboration around the PACT Initiative, which I will be talking about. Molly should we do the first polls

Moderator: Sounds good, so for our attendees you have a poll question up on you screen at this time. Have you completed the VA All Employee Survey in the past year? Go ahead and click the circle right there on your screen next to your response. The answer is Yes/No or Not sure. Alright it looks like we have a very responsive audience, we already had three-quarters of our attendees reply so thank you, we appreciate that, it helps inform the talk as we move forward. Okay it looks like we have had about eighty percent of our audience vote and there is a pretty clear trend so I will go ahead and share those results. It looks like about three-quarters of our audience reported Yes; about a quarter reported No and three percent are Not Sure. Thank you for that. Christian did you want to say anything before we move on to the next poll?

Dr. Christian Helfrich: Just that I am glad to see people filling out the survey, thank you very much from a researchers perspective in data completeness that is nice to see.

Moderator: Excellent, we will go ahead and put the second poll up there now. Have you conducted research with the VA All Employee Survey data or used the VA All Employee Survey data in quality improvement activities? Once again the answer options are: Yes/No and Not Sure. People are a little slower to respond but the answers are coming in, we will give people a few more seconds. Alright it looks like we have had about almost a ninety percent response rate, this is great. So I will go ahead and close the poll out and show those results. As you can see we have forty percent of our audience reporting Yes, they have conducted research with the Employee Survey Data; fifty-seven percent reporting No and four percent report Not Sure. So thank you once again to our respondents and at this time Christian I am going to turn it over to you so should see that pop up now.

Dr. Christian Helfrich: Great, thank you. This looks like an audience that is quite familiar then or at least many of you quite familiar with the All Employee Survey. Part of what we want to do today is to provide an overview of The All Employee Survey and its content. So for those of you already familiar with it this may be information that you are already familiar with. We want to bring up the particular issue or challenge with the All Employee Survey Data and that is the types of identifiers that the survey uses which limit our ability to link it to some of the other rich data in the Veterans Administration on quality of care and outcomes and things of that nature. Then again we wanted to talk about a particular example of using the All Employee Survey Data in an implementation evaluation of the VA’s Medical Home Initiative, an initiative to augment a patient centered medical home and primary care and some of the findings from that which I think really illustrate the value of these survey data. I am going to hand it over to my colleague David Mohr who is going to provide that background about the All Employee Survey, its history and again the content of what data are available.

Dr. David Mohr: Okay, well thank you for that hand-off Christian. David Mohr from the VA Boston Healthcare System and also one of the HSR&D Centers, the Center for Healthcare Organization and Implementation Research. I want to thank everyone for attending today and hearing about this great and wonderful survey. To start with I think it is important to understand why organizations do surveys to being with; what is the point or what is the focus of doing this. The survey distance is a pretty big distance actually and by one I counted looks like Survey Monkey that I think we have all used at one time or another and say a two billion dollar product. So there is definitely a lot of consumer demand for using surveys and Survey Monkey is a little bit different from what many organizations use, but I imagine the market there is even larger. Why these organizations do these surveys is one – because they want to know something about employees such as what they think about their report place; how satisfied they are and to know something about employees and other organizations so there are a lot of interests in being the best place to work and different surveys about in Boston we have one that we compete in that compares the Boston Healthcare System to other employers to see who is better or where are employees happier in the regional market. Another big area that a lot of people are interested in on this call is being able to look and connect the findings from the survey to employee attitudes and other organizational outcomes. So things like employee turnover, customer satisfaction, are the patients happy, the quality of care that is an outcome that tends to get examined a lot as well is patient safety. So trying to understand if the workplace itself and how people feel is a reflection of what product level of quality and serviced delivery happens. There is also a belief implicit within that knowing these scores can help you to improve these outcomes. So if you want to have more satisfied patients it is helpful to have a satisfied group of employees working at your organization. Again surveys can be used to identify areas for benchmarking so within the hospital is primary care the highest or the low or where does it fall compared to the other services and where does that score sit nationally. It is also helpful to look at data over time so you can track and trend to see where satisfaction or other attitudes increasing, decreasing; does leadership have a change and if so what kind of change does it have.

The information from the surveys can be provided back to organizations and managers to help identify areas for improvement. In fact a lot of the VA leadership have one of the many performance elements they are responsible for is trying to identify a few key areas based on the All Employee Survey as areas for improvement that they plan to focus and work on for the fiscal year.

The Employee Survey that we will talk about has been developed and has evolved into a way to address all those goals and more. The survey started out with an interest in 1997 surveying VA employees about job attitudes and organizational considerations and that was a much longer survey than it is known to be today. There is also another survey that happened around that time that looked at organizational culture and total quality improvement and eventually those surveys began to merge, there is another administration of the one VA survey in 2001 but starting in 2002 this is when a group of people at my office as well as the National Center for Organization Development in Cincinnati and a few other people with in that interest in that area came together to kind of focus on developing a more systemized or routine approach to assessing employees. We went through a number of pilot testing procedures with about six thousand respondents and came up with a best set of items. Today the survey is administered three different methods as it has been back in 2003 in the initial pilot. The primary method people use are the internet, just clicking on the link will take you to the main survey page. There is also the interactive voice response if you want to call up on the telephone and enter your numbers through the touch pad of your phone as well as the paper and pencil option. Primarily the internet is used in ninety percent of the responses.

Later in 2004, the full version of the survey was identified after the pilot test was administered to all employees, so that was about a hundred and eighty thousand I think at the time. Then after that there is another administration in 2006, and in 2007 it became an annual event and continues today on an annual basis. The focus was initially on the Veterans Healthcare Administration, but it has expanded to include the other VA agencies in 2010. So the benefits and the cemetery employees are also included now. In 2013 a substantial change happened with the survey, some items were removed and refrained so culture no longer part of the instrument, some items were refrained from indices to themes and a module approach that I know a PACT and others have used became more common. The module allows for people with interest in a particular topic to add a very limited number of items around a specific theme. The survey continues to be planned through administration in the upcoming year and beyond.

One thing to note about the AES is that it is somewhat unique and in some ways allows us to do this linkage between the primary care units and their outcomes. In fact every medical center has a designated site coordinator who is responsible for identifying work groups of employees that would receive a unique code for the survey. So some places might map a primary care line in their CBOCK and other places would map a primary care team in the east side of the building and another team would be mapping the west side. So there is a lot of flexibility in how facilities do this and that is by intent and design. By doing the smaller work groups it allows reporting of data back to the managers at a level of at least ten respondents and that number has been lowered recently from eight to five in the upcoming administration. So that is the smallest level of data that you can get reports on from employees. Also this data is all available in the Pyramid Analytics Cube for further analysis. So any employee with access to it can just go on, get a sense of how their work group is doing, how their facility is doing. And the National Center for Organization Development runs the process and they also produce annual reports for every facility based on their scores as well as giving a lot of feedback on various calls to everyone.

In terms of the content, we will go into this a bit more in the methodology section but there are four main sections, on one, demographics which focus on trying to understand who is responding to the survey. So basic things you might expect like gender, age, race, ethnicity, occupation and more. And the version of the survey up until 2002 had three themes – one focused on the individual; one focused on the work group and one focused on the general atmosphere of the facility so starting from the individual moving up, the level of organization to work group and further to the facility. You can see a few example concepts are listed there with things you have probably recognized before with work place civility being one of the more commonly used and promoted themes and psychological safety very popular and important for many organization and improvement efforts. One of the big things about doing all this data is helpful to know what it connects to so it is not enough to just know what a primary care score is you want to also know how the primary care employees compared to patient satisfaction in terms of stronger outcomes and the strength of that association.

I am going to turn it over to Christian to talk about some of the linkages in this process.

Dr. Christian Helfrich: As David was saying the All Employee Survey is mapped to work groups and that is done by the coordinators we mentioned at each facility. Those are operationally designed, they are designed for organizational development purposes to be able to identify surveys from a work group or a manager that might want to be able to track those data. It is not done for purposes of being able to identify comparable work groups say primary care clinics across facilities or across regional networks. the Survey is anonymous, there is a lot of detailed responding information, but to protect employees the survey is anonymous and the identifiers other than the work group are at the PACT facility level. For example here in Seattle it would be VA Puget Sound which includes two hospital locations and multiple community based outpatient clinic locations. It is quite a large unit.

These identifiers do not directly link to lower site identifiers. The VA has quite an elaborate system of systematically identifying all VA sites. There is one called the STA6A which corresponds roughly to clinics, like a community based outpatient clinic. Ideally the clinic level identifiers are useful because oftentimes those are the units when we compare something like the degree of implementation of the medical home we largely think of that as happening at the clinic. The clinic is the unit that implements the medical home and oftentimes we are interested in how panel of patients are managed across the clinic; quality of care metrics; panel issues such as staffing resources influence patient experience and access. Oftentimes the most logical unit of analysis is a clinic or certainly it is important to be able to identify those clinics. There is also a challenge just in terms of the time clients for the AES’s measured at its annual, previous survey it was around April and May it has recently gone a little bit later due to a conflict with another central survey. There can be issues just in terms of working All Employee Survey with other survey data that occurred at different point in the year.

Those challenges though can be overcome and we will talk about one example from the evaluation of the VA’s Patient Centered Medical Home Initiative; the Patient Aligned Care Team Initiative. The Patient Aligned Care Team initiative sought to implement a medical home across all inpatient and outpatient primary care clinics, I should not say inpatient primary care clinics, primary care clinics located at VA Medical Center and community based outpoint clinics. The initiative sought to expand access in large part through technology based visits so non-face to face visits through telephone or secure messaging. It sought to improve continuity of care having patients cared for by a team so the nurse or clinical associate; LPN; medical technician, the patients interacted with were the same nurse, the same clinical associate over time improved coordination with specialty care for continuity. Team based care so a primary care provider matched with a nurse, clinical associate, administrative clerical we will talk about that in just a moment. Again, use of electronic tools, I mentioned secure messaging, but also some tools for managing referrals to specialty care, electronic specialty consultations and tele-video consultations with specialty care, population health tools including disease registries, sophisticated management tool that identifies patients at high risk for hospitalization or death. And hiring to support the team based model of care increasing the average number of support staff per primary care provider from 2.3 just prior to the initiative to three full time equivalents for every full time primary care provider. This resulted in hiring over a thousand nursed case managers, sorry care managers since 2010.

This team based model at the heart which is the patient, but working with the patient, managing their care is a full time primary care provider with a full time nurse care manager, somebody who handles health behavior supports, chronic disease management, a clinical association/LPN/medical technician that works directly with the primary care provider and then an administrative clerk who handles scheduling and other issues for the patient. Around this team is a broader aligned healthcare team. Most notably in the VA we put a premium on behavioral health, integrated behavioral health in primary care including Social Workers, care managers, psychiatrists and psychologists and then other specialists – pharmacy and social workers who not just have just mental health but help with more traditional social work, job housing. These broader healthcare providers work with the primary care team, the core team.

As part of the evaluation of the PACT initiative, a team led by Karin Nelson developed an overall index at the clinic level to assess the degree of implementation of this complex model. This index we call the PACT Implementation Progress Index or Pi2 measures seven of the domains of the PACT model including access, continuity, coordination, team based care etcetera and uses data from a number of sources including patient surveys which we will not go into but there is an ongoing survey of patient experience which is done nationally in the VA. Employee surveys, their experience of implementing PACT and their reported staffing levels and degree to which they feel they are practicing team based care then administrative data on access and continuity and comprehensiveness of care. This index, again clinic level index was validated by comparing the clinic level index with key outcomes that we expected to improve as a result of implementing the patient centered medical home. These included overall patient satisfaction with care, provider and staff burnout work related burnout, and quality metrics, quality of care standard national quality of care metrics and utilization including ambulatory care sensitive hospitalizations and emergency department utilization. We found significant associations with clinics that had higher scores in the PACT Implementation Progress Index doing better on most of these metrics and inconsistent patterns. We are interested in the degree to which the clinics that were doing well in this metric on this PACT Implementation metric. The degree to which these clinics appeared to be places that had positive supportive workplace climates prior to the launch of the initiative. That is not to say, were the clinics that we saw doing well in 2012 on the PACT Implementation Progress Index, were these clinics that had higher levels of job satisfaction and employees reporting supportive workplace environments that were \_\_\_\_\_ [00:25:12]. And where they had high level of satisfaction with the type of work they were doing and the amount of work they were doing, were places that did well on PACT Implementations, places that were already doing well a workplace morale climate.

We were able to do that using the All Employee Survey because in 2013 the All Employee Survey included a PACT module and David had mentioned that starting in 2013 the All Employee Survey changed and adopted a module sort of module that allowed for brief modules to be added on to the reoccurring regular content of All Employee Survey. This PACT module included a few PACT related items obviously staffing, delegation within teams, but it also included a link to the STA6A identifier and clinic site names that are associated with that alpha-numerical STA6A identifier. For the 2013 All Employee Survey we had this link for PACT respondents, primary care respondents on PACT teams, we had this identifier, STA6A that we could link within the work group. From that we were able to create a crosswalk, colleagues with the National PACT evaluation that Walter Clinton created a crosswalk from that All Employee Survey work group to a STA6A for the 2013 cohort and we were able to then apply that back to cohorts from the All Employee Survey prior to the PACT Evaluation. I am going to turn it over to my colleague Ryan Derickson to talk about linking those data and then conducting this analysis and what we found.

Dr. Ryan Derickson: Sure thank you Christian, on the Share My Screen. Christian and David both did a great job explaining the All Employee Survey and the Pi2 instrument and also the motivation that we started with for finding whether or not there were satisfaction or organizational health type factors that would influence successfulness of PACT Implementation. We will mention the data briefly so as Christian and David mentioned we had to go back and pull out specific AES responses and groups from previous years based on the match that Walter Clinton and his team were able to complete. We were pretty happy with the recovery we had, of course a lot of changes in three or four years so we did not expect to match everyone but we found about a third of groups matched going all the way back to 2009 and then almost half matched in 2012. So about seventeen thousand and twenty-nine thousand respondents respectively so that is a pretty robust sample size that I think we were happy to get. Of course that means not all groups had matching fact and Pi2 data so we looked at a few potential indicators that there might be differences between groups that did and did not match and we did not really find anything. The groups that did and did not have matching data had similar Pi2 scores overall and on the specific dimensions that Christian mentioned and also saw similar numbers of patients. Just a quick way to see if there was anything that jumped out at us to suggest that we were looking at different groups or some sort of selection or matching bias and we really did not find anything, which was encouraging.

I will dip into the details of the method that we used to analyze these data. We started out with the if

you will sort of quasi hypothesis that something relating to organizational health would impact the successful impact of PACT implementation. We know both from research in VA that NCOD and others have done and also from a lot of history and literature of industrial organizational psychology, business, change management, etcetera that the climate and the culture and the

organizational health of a group really does impact their outcomes and their ability to be resilient

and to withstand change so we expected to find something. That being said there are a lot of

challenges as Christian and David mentioned with matching survey data across years and especially

at some sort of aggregate level people join and leave the organization. There are a lot of confounding reasons that relationships may not show up in the data when there may in fact be a relationship there blatantly.

We started with that and sort of working assumption that there probably was something to this

relationship. As I said we did not specify specific hypotheses about what we expected to find or the

impact that we expected certain dimensions of organizational health to have. When we are talking

about data of the scale and scope that we were talking about with sixty All Employee Survey

variables and probably twenty or so Pi2 variables across multiple years you can really justifiably

make lots of different hypotheses and maybe conflicting hypotheses. So we primarily wanted to

start first with almost a data mining approach and see if there was anything to find as we expected

there would be and to sort of let the data speak and see what there was to find. We started with a

mix of data mining and psychometric methods. To get specific for a second, of course there is

always a balance between being able to explain a lot of variance and parsimony, the more things

you include in a model usually the more variance you explain but the utility of that explanation goes

down because you are saying that more and more things are relevant. Our goal first was to balance

those two in some cases competing demands of parsimony and of being able to have robust

explanation statistically speaking of our criterion which was the overall impact to Pi2 index score

which was a combination of those specific dimension scores that Christian talked about like comprehensiveness and communication.

We started by looking at models of different sizes. Everything from one predictor up to probably

thirty predictors or thirty-one in the case of the OAI which focuses again on the work group level

perceptions. We returned the most explanatory and most parsimonious model from each of those

sizes. For example the model that has seven predictors that explains the most variance of all the

other models with seven predictors would be retained and then we would see how

much variance we explain and then also how parsimoniously we explained that. That was by way of

using something called adjusted R2 which if you are familiar with regular R2 it is a measure of the

amount of variants accounted for. Adjusted R2 just biases that; traditional R2 estimates down a bit

based on the number of predictors you have in your model. If you include a lot of predictors you

explain a lot of variance but also you get penalized because you are not being parsimonious. Then

we can look at the relative importance of each of those predictors also because as most of you

probably know the order you enter predictors into a model the term is to some extent what you get

back.

We started by using that method and then we looked at the different components of the All

Employee Survey separately to begin with. So the JSI again which is the Job Satisfaction Index which measures satisfaction with individuals or measures an individual’s satisfaction with components of their job like pay or promotion opportunity; then the OAI which again focuses on the work group level. Then we did a bit with culture but left it out of the discussion here because we removed it subsequently from the AES so it is going to be less useful going forward. We are going to focus here on the JSI and the OAI. Then we also included covariates at the group level so the proportion: female; tenure; then we coded supervisory level; then we coded in the group size as the number of employees that were matched to that group. Then we considered each separately and then we combined them at the end to see across individual and group perceptions what is coming out as explanatory as it relates to Pi2 Index.

We will primarily discuss those results. We have done some additional work since then with more pure data mining methods like random forests and some thing all conditional inference trees. Of

course each method produces specific results but there is also been very similar across these

different methods we see the same types of things coming out as important. I guess Molly this is our third poll if we can do that.

Moderator: Thank you let me go ahead and put that up now. For our attendees, which job

satisfaction measure do you think are associated with PACT Implementation? Work Satisfaction

(satisfaction with the type of work performed; Perceived Customer Satisfaction; Overall Job

Satisfaction; Satisfaction with Direct Supervision or Not Sure. I may have set this up wrong, did

you intend for it to be select all that apply?

Dr. Ryan Derickson: Whichever way you have it is okay.

Dr. Christian Helfrich: Okay I am thinking which do you think is the strongest association.

Moderator: Okay. Good to hear, excellent. It looks like people are taking their time giving this

some good thought, it is perfectly okay, these are anonymous responses if that impacts you at all. It

looks like we have had about two-thirds of our audience vote and the responses are still streaming

in so I will give people a few more seconds. We have quite a varied spread, not a lot of agreement

on this one which is fine. Okay it looks like we are going to cap off at around eighty percent

response rate so I am going to go ahead and close this out and share those results. A quarter of our

respondents replied Work Satisfaction; twenty-eight percent said Perceived Customer

Satisfaction; nineteen percent said Overall Job Satisfaction; twenty-two percent said Satisfaction

with Direct Supervision and six percent reported Not Sure. Thank you for that and we are back on

your slides.

Dr. Ryan Derickson: Great thank you and I think some of the spread in responses that we see there

reflects how we felt initially when thinking about the types of things we might see. You can make an argument for a lot of different relationships. What you are seeing now is what we actually found

so we looked at these relationships in 2009 so pre- or just beginning PACT Implementation I think

that was primarily around 2010 when that began then post- or wrapping up implementation again in

2012. So for the job satisfaction index, for the individual level perceptions, we found that work

satisfaction and perceived customer satisfaction were positively predictive of Pi2 scores in 2012.

Going into the process in 2009 groups that were tended to be more satisfied with the type of work

that they did which was what that work satisfaction question means. For example if you are a nurse

the question would refer to your satisfaction with being a nurse in general not with specifically being a nurse in the VA. So work satisfaction then perceived customer satisfaction positively predictive in 2009 of ultimately the successfulness of PACT Implementation. Then again in 2009 overall job satisfaction had a negative relationship so starting out initially groups that were less satisfied overall tended to end up doing better in PACT and we will get into some implications of that here in a few minutes. In 2012 we see perceived customer satisfaction again positively predictive of the successfulness of PACT Implementation and the satisfaction that people reported in 2012 compared to two years ago which would primarily be during the time their group actually implemented PACT had a negative relationship with the successfulness of PACT Implementation. Again we will talk about some implications of that in a few minutes.

Here we just see the questions again. The numbers in gray are the regression coefficients, the beta weights. Then at the bottom we see the adjusted R2. We are accounting for at least in an

adjusted sense around ten or eleven percent of variances that is if you were to reverse the

adjustment it would be a bit higher which was pretty encouraging again considering all the

challenges around having data from multiple surveys across years and not being able to track individuals across that time.

Now we will talk for a second about the results of the OAI, so the portion of the survey that focuses on worker perceptions again 2009 pre- or just beginning PACT Implementation then 2012 post- or wrapping up implementation. In 2009 agreement agreement that processes and services were designed to meet customer needs which goes sort of hand in hand with the perception of higher

customer satisfaction then we saw a second ago. Had a positive relationship with the ultimate successfulness of PACT Implementation. Also the agreement that coworkers took a personal interest in their colleagues was positive related as well. That speaks to collegiality that speaks to civility, respect. Then in 2009 also environments that required employees to work very fast, very

demanding, potentially high stress environments were related to lower successfulness of PACT Implementation. In 2012 we saw the agreement that managers set challenging but obtainable goals

and reviewed progress towards meeting those goals those perceptions were related to the successfulness of PACT Implementation. So how active of a role the mangers take during the

process and change and how much support do they provide employees in meeting the new and

essentially demanding goals that they are setting. Then environments that encourage new practices

and ways of doing business; innovation basically had a negative relationship with the successfulness of PACT implementation.

Again we will talk about these implications again in a few minutes, but this again shows the

regression coefficients and then the amount of variance that we are capturing at the bottom so eleven percent and six percent.

We will summarize briefly the 2009 findings sort of wrapping up the OAI and the JSI together.

Implementation was usually more successful if employees were satisfied and if they felt that their

customers were satisfied. This speaks to this preexisting focus on customer service that could make the transition to PACT easier. If the norms of the group are supportive of customer service and then

this new initiative or this new systems redesign emerges with the goal making that service better,

then it is more clearly and directly motivating for employees to buy into that change if they see that

the goal is to do something that they already buy into which improves something they already buy into. Worker perceptions of overall job satisfaction again were negatively related to PACT implementation. One explanation for this could be that PACT brings structures, brings structure

and supportive processes and supportive policies and norms to groups that might have needed them more badly than other groups. If groups are not satisfied, if there is less structure you bring this new

process in and supporting mechanisms to manage the change successfully and you see their ultimate

results going up in terms of the successfulness of PACT implementation and thereby better patient outcomes. These relationships again were sort of independent or persisted after controlling for the

demographics I mentioned earlier so there was sex; tenure; supervisory level and the other group so even accounting for those these relationships still persisted.

The findings in 2012 again were pretty similar to 2009. Again we are seeing higher scores on the

Pi2 if employees felt they provide good service, have supportive managers, have realistic and

achievable goals and work in a civil environment. Again this pre-existing customer centric focus

and this desire to provide good service might make the change a little bit easier for people to buy

into if again they see it is already supporting something that they do. The satisfaction change in the

last two years ended up showing a negative relationship which at first you might think that to say that PACT was a dissatisfying experience but I think if we look a little bit deeper into it, we see that a lot of change management literature and specifically the Freeman’s Model of Managed Resistance basically predicts this type of a dip. We see that especially with something that is of the scope of PACT redefining service and redefining peoples day to day work lives and relationships, there is likely to be this initial period of decline and even performance in addition to perception. As every change has initial inefficiencies there is friction that has to be overcome so there is usually a bit of a dip and we see this in a lot of the work that NCOD consulting does as well. When there is a big change usually we see a decline at first but if that decline can be managed if you address the concerns usually transparency, if you address vulnerability from individuals that might arise usually we see those perceptions and those performances rise. And as the change materializes and as it becomes concrete and as buy-in increases usually we see performance and perceptions higher than they were before the change. So usually the change works, it is an issue of change

management and it is an issue of overcoming the inevitable obstacles and something that is of the scale that PACT implementation was and continues to be.

There was a negative relationship with innovation. Again that is not terribly surprising given again

the complexity and the scale of the change we are talking about. That is usually not a time in which

you want people innovating and experimenting. There is a degree I think of rule following that just

has to be a part of that change so it is not unexpected and it is not shocking to see innovation scores

go down. Again going back to the idea of change management and of reintroducing things like

autonomy and things like innovation we expect to see going forward those scores recovered

in the groups that have successfully implemented PACT. Because there is nothing about PACT in

and of itself that discourages innovation, it is just more about the change and the ambiguities and

the necessary mandates associated with implementing that change.

The overall summary in one sentence is that there is something to this relationship. We went in

expecting that the environment probably did impact the successfulness of PACT but it was not at all

a given. I think that we would find that borne out in the data because of the reasons and limitations

that we discussed. It was really encouraging to see the findings that we saw and especially the

amount of variances or the strength of those findings that we were able to produce around ten or

eleven percent of the variance in some cases was attributable to various indices of organizational health. This adds another piece to the already pretty compelling stack of evidence that the

environment that employees work in impacts very concrete and very tangible outcomes and behaviors that their group produces and expresses. This is \_\_\_\_\_ [00:48:28] [lost audio]

Moderator: Ryan it looks you seemed to have lost your audio. Let us see if we can get him back on. While I shoot him a message can I get you to pinch hit David or Christian.

Dr. Christian Helfrich: Absolutely, yes that is odd, that we lost him. I will just pick it up on what Ryan was saying.

Moderator: Christian are you on?

Dr. Christian Helfrich: Yep, you cannot hear me.

Moderator: David are you on?

Dr. Christian Helfrich: Hello [typing].

Dr. David Mohr: I am on.

Dr. Christian Helfrich: You guys cannot hear.

Dr. David Mohr: I can hear you Christian.

Dr. Christian Helfrich: That is odd because I could hear…

Moderator: My apologies, I am the only one that lost audio I apologize for interrupting Ryan go

ahead.

Dr. Ryan Derickson: No that is okay. Basically we \_\_\_\_\_ [00:49:30] [lost audio] data and the time

disparities between our measurements and our outcome we found things that I think are very encouraging and very much in line with much of the organizational health literature and also our other findings in VA specifically. Then a point back to what Christian mentioned, the environment we are finding is important. Of course it is not determinative, it is not the only think that impacts the

successfulness of PACT implementation, there are of course a lot of competing personalities and a

lot of political considerations that are involved in any type of change especially change again as big

as PACT was and is. But the climate piece I think is definitely an important component and it is

something that we are seeing can predispose groups that ultimately have better outcomes down the

road.

Again, the relationships are complex; we see that there are negative relationships with some things that we might not have expected initially which again speaks to the complexity and also to the complexity in managing change at this scale. We see initial declines that will hopefully be followed by gains if the model of change holds true for PACT and it has held true for many other types of change. So we are optimistic to see some of the negative relationship recover as PACT becomes the normal and as the change becomes sort of concrete.

I guess at this point I will either turn it back to Christian and David for more comments or we can

open it up for questions from the audience.

Moderator: Excellent, thank you very much. Can you go ahead and advance to the Questions

slide and Christian did have to log off for another call so if any of the audience members have

questions specifically for him you will need to contact him offline. David do you have anymore

comments that you would like to make before we move into QA.

Dr. David Mohr: No thank you, but thanks to both presenters today.

Moderator: Thank you is that you Christian.

Dr. Ryan Derickson: And the audience for attending.

Dr. Christian Helfrich: Sorry just before I go I do want to make a quick comment. I think picking up on Ryan’s findings I was pretty stunned at the amount of, the strength of association between work place climate in 2009, which was essentially a full calendar year before the launch of this initiative. The measure of implementation two years after that, so three years later we found very strong associations and associations that actually made a lot of sense with the customer satisfaction/customer orientation. Just like Ryan said, the negative association with overall job

satisfaction is entirely consistent with the change literature. A big massive change is disruptive and

it is not fun; it is not a fun experience. I think that this does point to the potential incredible value of

these data, and just kind of going back to the beginning of the conversation, the challenge becomes

working it, aggregating it at the right level for the question we are asking. The current findings, the

right level was at the primary care clinic, other analyses it might be a different level but that is where the challenge comes in. And hopefully with the new QUERI programs, we can find ways of

linking these data and using this incredible resource. That is it for me and thanks so much.

Moderator: Thank you for joining us Christian. For our attendees we are ready to move into the

Q&A portion so if you have a question or comment you would like to make please use the Question

Section of the dashboard, just click the Plus (+) sign next to the word Questions and that will

expand the dialogue box and you can submit your question or comment there. I do believe a few

people wrote in asking for the link to the slides, if I did provide you the wrong link go ahead and

write in again and I will get you the right link to those slides or there is a live hyperlink in the

reminder email you received.

This first question I believe it came in when you were speaking Dr. Mohr. This person just want to

confirm that the minimum number of responses was changed to eight in 2015?

Dr. David Mohr: Yes I believe that is correct and Ryan can you also confirm that?

Dr. Ryan Derickson: Yes that is correct it went from ten previously I think all the way going back

to the beginning of the survey. It was then and then it went to eight in 2015 and for 2016 and

forward we are drooping to five.

Moderator: Thank you. The next question – where was the data for measuring PACT outcomes pulled from? Was that CDW?

Dr. Ryan Derickson: That was what Christian had said to me, I do not know to what extent it is

present in CDW or some other type of dashboard function. It was the results of the 2012 or 2013

administration of the PACT Implementation Progress Index but where the data sits now would be a

question for Christian I think.

Moderator: Thank you for that reply. The next person writes – is there open access to the

responses of the All Employee Survey?

Dr. Ryan Derickson: At the aggregate level yes the data are available again pyramid analytics

which I believe is accessible on the web now; traditionally it was ProClarity, which had to be installed on everyone’s desktop. Results are available there; you can drill down to specific work

groups and specific facilities or by demographics so that is the primary way to access All Employee Survey data.

Dr. David Mohr: And there is also a way if you are using this for research purposes a data use agreement that can be requested as well.

Moderator: Thank you both. The next question we have – did I hear you say that we do have data

indicating positive patient outcomes from PACT implementation? Or were you just referring to the outcomes that PACT is being implemented?

Dr. Ryan Derickson: I would have to pull up the actually Pi2 instrument to be sure but I am pretty

certain especially after reading if you go back to the presentation later, there is a citation by Karin

Nelson and I think Christian was the second author on that in 2014. That is the article that appeared

in *JAMA* that validated the Pi2 as a measure of PACT implementation success. A big piece of that was inpatient outcomes. Again, I cannot say off the top of my head specifically what those

outcomes were but that would be the resource I would point to you for that.

Moderator: Thank you. Just for people’s information we do have a monthly PACT Cyberseminar

and I know we have had a session on the PACT Staff Surveys as well as the Pi2 so you can look

back in our archive catalogue and find sessions on both of those topics if you would like more detail. Somebody writes in – excellent presentation, I am an epidemiologist and I am always pleased

to hear that other researchers are checking for selection biased. Thank you for that comment.

Is research planned to link employee engagement data with AES and patient satisfaction impact?

Dr. Ryan Derickson: I will take a stab at that first then David feel free to jump in. We are actually

adding an engagement or I guess creating would be a better way to describe it, an engagement factor for the 2016 and going forward All Employee Survey and we will be able to do that retroactively to the extent that some of the items are the same as items that appear there currently. That would be something we would definitely look to include as far as correlating to other indices of organizational health or patient outcomes. Yes, that is a great point.

Dr. David Mohr: So stay tuned for more information to follow.

Moderator: Thank you. Will the AES survey be quarterly basis or biannual? I believe it is currently annual.

Dr. Ryan Derickson: That is correct, it is currently annual and there are no plans that I am aware of to change that to a more frequent basis. This is driven by HS&A and CO and NCOD is implementing it. There is a quarterly Pulse Survey that goes out to a thirty-three percent sample every quarter except for the quarter that the AES occurs in and then we will include those questions in the AES. There is quarterly data at the thirty-three percent sample level, the All Employee Survey occurs in the fall at the census level and then there is the Federal Employee Viewpoint Survey or the FedView that usually I think the data usually comes out around March maybe for the previous year. There are five, maybe six big sources of data throughout the year.

Moderator: Thank you. We do have two pending questions left. Were any statistics of staff

turnover included in your research?

Dr. Ryan Derickson: There was nothing about staff turnover specifically, there were turnover incent questions that were included as candidate predictors into those models that were ultimately selected. Actual turnover numbers are tricky to include because they are not always reported at the same level of analysis that the rest of the data we have are so it is not certain and probably unlikely that we could get turnover data down to the clinic level. Usually that is reported at the facility level.

Moderator: Thank you I know we have reached the top of the hour but we do still have just two pending questions. Are you two able to stay on so we can capture the answers in the recording?

Dr. Ryan Derickson: Sure.

Moderator: Excellent, thank you. As I understand it the Nursing Work Index is a subset of the AES. Was this a separate survey or were there questions intertwined with the AES Survey overall?

Dr. David Mohr: Yes so for the NWIP/AES I kind of help with the reports for that. That was not considered part of this and it was added as a module to the 2014 and 2015 All Employee Survey. That data in the prior years was not overlapping with this point, but NWIP has separately but not in conjunction with the AES during this time.

Moderator: Thank you and the final pending question – you mentioned that one-third of groups matched back to 2009, does that mean that these matching work groups retained the same name for those years?

Dr. Ryan Derickson: It means that they at least retained the same workers numbers. Sometimes names change and then we go back and we retroactively change the name to match. Walter Clinton would be the person to contact for more information about the matching. There was also more detail in the matching then just did it match or not, there was a degree of disagreement that was allowed for among people so maybe three-fourths of people said that they were mapped back to this clinic and one-fourth disagreed and so then that would be different then if everybody agreed for example. So the crosswalk was a very complex thing and Walter Clinton would be the person to follow up with on that.

Moderator: Excellent, well thank you both very much. Do either of you have any concluding

comments you want to make before we sign off?

Dr. Ryan Derickson: Thank you for hosting and thank the audience for attending and for the questions.

Dr. David Mohr: Thank you everyone and for further questions please feel free to follow up with any of us.

Moderator: Wonderful, well thank you both so much for coming on and lending your expertise

to the field and of course thank you to our audience for joining us today as well as your patience

with me having technical difficulties. I am going to close out the session in just a moment and

guess what, you all have a feedback survey to provide. So if you can take just a moment to fill out

the few questions that we ask it does help us to improve the sessions we have already presented as

well as give us options for new sessions to facilitate. So thank you once again everyone and do

enjoy the rest of your day. Bye.