

Transcript

Slide 1 – Opening slide with title and CDC disclaimer – no audio or transcript text

Slide 2 ... Thank you so much and welcome, everybody, to the National Diabetes Education Program's cross-cutting webinar on population health. We have a wonderful audience and some wonderful presenters. Our audiences really are from where people live, work, and play. About a third work for nonprofits. A third work for the government, and about a third are involved in the business world.

Slide 3 ... We also have some wonderful presenters, with a lot of experience. We have Dr. Ron Loeppke, who is vice chair of U.S. Preventive Medicine. He is past president of the American College of Occupational and Environmental Medicine, and he also was the chair of a workgroup that has updated the National Diabetes Education Program's *Diabetes at Work* website, which we will look at later.

Our second speaker is Dr. Jeanette May, who is a principal investigator of a Robert Wood Johnson Foundation (RWJF) grant that looks at how communities and businesses can get together to improve the health of their communities.

Slide 4 ... So why are we here? Hot off the press, in the past two weeks, there was an article from Centers for Disease Control and Prevention (CDC) researchers in the Division of Diabetes Translation that has shown that the costs to people who have diabetes have increased. And the reasons are that people are accessing more services, and also that people are using more medication, and because the costs of drugs have risen. So we know that we have an epidemic of diabetes.

Slide 5 ... So what can we do? The goals of this webinar include learning about the benefits of population health management, where we all live, work, play, and actually pray, as well. We want to learn strategies to show how worksites, businesses, and community organizations can work together. What are some best practices? Why does it matter? The last thing is that we want you to learn about resources in the public domain that everybody can access to help them manage diabetes where people live, work, and play. These are resources that everybody can use—providers and consumers. And we will go over those as well.

Slide 6 ... So, some background: What is the National Diabetes Education Program? We always use the acronym, NDEP. NDEP was established in 1997, because we wanted to promote early diagnosis, improve diabetes management outcomes, and prevent and delay the onset of type 2 diabetes in people who might be at risk. It is jointly sponsored by the Centers for Disease Control and Prevention and the National Institutes of Health.

Slide 7 ... We also have over 200 partners in many sectors—federal, state, and private. We also have stakeholder groups. The group that is really involved in this particular webinar is the Business Health Strategy stakeholders group. This group includes business coalitions, groups

such as Population Health Alliance, health plans, state health departments, occupational health providers, folks from the American College of Occupational and Environmental Medicine and the American Association of Occupational Health Nurses, and others, of course.

Slide 8 ... We want you to make the community an integral part of your health care team, as we said, where people live, work, and play.

So I'll turn it over to Dr. Ron Loeppke, who will start our webinar. Thank you, Ron.

Slide 9 ... Thank you, Dr. Allweiss, and thank you everyone for joining today. It's a privilege to share some thoughts with you about population health management, and I have a lot of information to go through. You will have access to all of our slides later, but I will be moving quickly in the time available.

Slide 10 ... I want to talk about the "why," the "what," and the "how" of population health management: why it's important, given the converging trends that are really advancing the value of population health management; what the business case for it is, and why employers are interested; and how it works—actually examining some of the attributes and results of successful workplace-oriented population health management initiatives.

Slide 11 ... First of all, the converging trends: There are epidemiological, political, cultural, and financial trends that are driving the need and the interest in population health management.

Slide 12 ... The epidemiologic trends include the global burden of health risk and chronic illness; the age wave, the so-called silver tsunami that is about to hit the health care system; and the compression of morbidity as one of the potential positive solutions.

Slide 13 ... The challenge, this global challenge, is the epidemic of noncommunicable diseases that tend to drive mortality because of unhealthy lifestyle behaviors. We could call it the 5-5-75. The *five* lifestyle behaviors—physical inactivity, poor nutrition, smoking, alcohol, medicine nonadherence—and the *five* chronic conditions—diabetes, heart disease, lung disease, cancer, and mental illness—that impact 75 percent of the deaths worldwide.

Slide 14 ... The age wave: As we all know, our baby boomer generation is hitting the beaches of our health care system. There are over 10,000 people every day turning 65, and there's going to be a lot of demand on the health system, in large part due to a lot of lifestyle-related illnesses and chronic diseases.

Slide 15 ... One thing to consider: Dr. Dee Edington has shown in many years of research that, from a health care cost perspective, it's actually the health risk that impacts costs more greatly than the age of the individual or the population. In other words, you can see the costs across the age bands, and those for low-, medium-, high-risk individuals. For example, an individual between age 35 and 44, but who has high health risk, will have, on average, about \$5,700 in annual medical costs. Whereas, someone that's greater than 75 years old, but has low health risk,

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

will also have around \$5,700 in medical costs. So actually, risk trumps age in terms of health costs in America.

Slide 16 ... In the United States, everyone is familiar with the fact that over half of all causes of death are related to lifestyle, but don't know that only 20 percent actually are related to heredity, so we can't blame our parents for everything, for the illnesses and conditions that we tend to develop. In fact, one professor in my preventive medicine residency said that largely, how we live dictates how we die in the United States. But some good news is the growing body of evidence and science for a phenomenon called the *compression of morbidity*.

Slide 17 ... What we see is that, in America, people are born, they get into their late twenties to early thirties, and typically, they're at the peak of health; then, in general, society tends to see their health deteriorate over time and they actually get to a lower-than-acceptable quality of life in later years. By this time they're having multiple chronic conditions, are on many medications, and are in and out of emergency rooms and hospitals.

It could be different, though. It has been shown that, if people just paid attention to some of their healthy lifestyle—and I'm not talking about being a marathon runner, I mean actively getting some walking, some physical activity, not smoking, eating healthier—that they can actually postpone the age of this onset of morbidity and compress it into a shorter time. Their life expectancy can be increased by reducing health risks, their quality of life can be increased, but then they can “Live healthier longer and die more suddenly at lower cost,” or experience—using a sports metaphor—sudden death in overtime. The reality is that it has been shown over a 30-year timeframe that this does occur.

Slide 18 ... The political trends: We've seen the Affordable Care Act and the National Prevention Strategy focus on aligning incentives among consumers and providers and employers around improving population health management and higher quality and lower costs with some of the initiatives of the accountable care organizations (ACOs), and the patient-centered medical home (PCMH).

Slide 19 ... Just as a very brief reminder, ACOs are models that make physicians and hospitals more accountable, outcomes-oriented, and performance-based, with a goal to improve the value of health services, control costs, and improve quality. Similarly, Patient Centered Medical Home (PSMH) is more about developing a primary care physician relationship and whole-person and whole-population oriented integrated and coordinated care—again, aligning incentives around better clinical outcomes.

The cultural trends driving population health management include a phenomenon in which I think that health is becoming the new green. In addition to the interest we have, as a society, in a sustainable external environment, I think there is an increasing interest in the sustainability of our internal personal health environment. There are the whole social networking game theory

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

applications that are innovating a lot of the health care industry and motivating people to maintain better health.

Slide 21 ... And with the mobile wireless technology that is transforming the health care industry and the mobile apps, smartphones, what's interesting is mobile technology is the world's most ubiquitous platform. In fact, more people have access to cellphones worldwide than drinking water, electricity, or a toothbrush.

Slide 22 ... And we know from studies that are projecting where this will be, that by 2020 it's suggested around 160 million Americans will be monitored and treated remotely for at least one chronic condition.

Slide 23 ... There are those of you interested in the movement of the mobile wireless apps that are underway. There may well be a time where doctors even prescribe evidence-based mobile health apps because it allows perpetual connectivity and communication with consumers, with patients—helping translate information into knowledge and knowledge into action and getting reminders and notifications.

Slide 24 ... What about the financial trends? Well the problem we all are aware of is the cost crisis. But for the most part, it is caused by the health crisis in our society.

Slide 25 ... Seventy-five percent of U.S. health care costs—of the over \$3 trillion now spent in health care annually—is related to chronic diseases. For every Medicare dollar spent, 96 cents are related to these chronic diseases, and for Medicaid, it's 83 cents.

Slide 26 ... Dr. Dee Edington is a renowned researcher and has over 300 peer-reviewed medical journal articles of his research and published books. But the bottom line is that as health risks go, so go health costs. The great thing is, though, that as you reduce health risks you can reduce health costs. That's an important phenomenon that's driving the business value of population health management.

Slide 27 ... We can always remember from the past the Benjamin Franklin quote, that an ounce of prevention is worth a pound of cure.

Slide 28 ...What we also recognize is that the bigger problem to employers is the total cost impact of poor health.

Slide 29 ... By that, what I mean is we were able to do some research and publish some studies documenting that for every \$1 of medical/pharmacy costs the employer pays out for their employees, on average there are also \$2 to \$3 of these health-related productivity costs: absenteeism, short-term and long-term disability, or presenteeism, where the worker is present but not performing as well because of a health risk or a health condition that's not well managed.

Slide 30 ... In fact, in that study, we looked at the top 10 medical conditions driving medical/pharmacy costs and see the typical top 10, with cancer being at the top of that list.

Slide 31 ... But when you add in the costs of presenteeism and absenteeism, it's a different top 10 list, with depression being the number one medical condition with the highest total cost for the employer community.

Slide 32 ... So it's an element of functional outcomes that we need to include with financial outcomes when looking at the efficacy of care. In fact, in one of the case studies I was able to be involved with, in a public company, 58,000 employees, the CFO estimated that there were eight days, per employee, of health-related absenteeism and presenteeism. And he asked the question, "If they got back one day per employee per year of that current lost performance, what would it be worth to that company?" And for them, it is worth \$18.8 million to their Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA), or bottom line. They (the company) traded at a 13 times multiple in Wall Street, so that translated into a \$240 million estimated market cap increase. They had 292 million shares outstanding, so it was an increase of 84 cents in per share value if they could get one day back per employee per year out of the eight days currently lost to health-related absenteeism and presenteeism.

Slide 33 ...So the solution is really focusing on evidence-based population health management.

Slide 34 ... We know that preventive medicine is a key component of that, because CDC has shown that 80 percent of heart disease and type 2 diabetes and 40 percent of cancer are preventable if people just stopped smoking, ate healthy, and exercised. Now, the thing is, we all know that. Our grandmothers told us that. But the challenge is, it says easy and does hard for too many people.

Slide 35 ... And in fact, some people think more of the health of their pet than they do themselves.

Slide 36 ... Therefore, what we see in the industry is this need and this focus on overarching whole population health management that includes primary, secondary, and tertiary prevention. Primary prevention—keeping the healthy people healthy. Secondary prevention—earlier detection and diagnosis through evidence-based screening. And tertiary prevention—early intervention with evidence-based care management to reduce morbidity complications and costs of people with chronic conditions.

Slide 37 ... As an example, there is obviously a need for better diabetes population health management. Now, 86 million Americans have prediabetes. Yet, 77 million are unaware. Of the 29 million Americans that have diabetes, 8 million are undiagnosed. You can see on down the line the challenges that we have in really effectively treating and controlling and diagnosing people with diabetes, as well as preventing those that have prediabetes from developing diabetes.

Slide 38 ... We have examples in the literature that talk about evidence-based population health management. This is an example of the study that I was able to do with Dr. Edington and others. We analyzed the health risk assessments, blood test screening results, blood pressure, and weight measured, at baseline and after two years of a workplace wellness personalized preventive plan.

Slide 39 ... We were able to show that there was a net/net movement out of the high-risk segment of the population, out of the moderate risk, and into a lower health risk category. In fact, of the people that started out high health risk—and this is defined as there are 15 individual health risk factors, like blood pressure and fasting glucose, etc. If you have five or more of those 15 risk factors that are high, then you are in a high-risk category. If you have three or four that are high out of the 15 you are in medium risk, and if you have zero to two, you are in low risk.

Slide 40 ... Of those starting out as high risk, after two years on their personal preventive plan, 45 percent moved down to medium risk and 18½ percent moved all the way from high to low risk. So this is significant and is effective.

Slide 41 ... But I wanted to make sure it was clinically significant and not just categorically significant. So of, for instance, people that have elevated high-risk blood pressure (meaning higher than 140/90), there were 923 people at baseline out of the 7804 people in the study that had elevated blood pressure. After two years on the preventive plan, 81 percent of those people, 744 of them, came down out of the high-risk blood pressure category, and actually their mean blood pressure rating was 123/77, which is normal. So, it was clinically significant. And the vast majority of those people were doing it without medication, through lifestyle management. There were similar findings related to fasting blood glucose reductions and BMI and HDL and cholesterol.

Slide 42 ... As an example of population health management, we also looked in detail through the claims data. This is an example of an employer that spends over \$125 million a year in medical/pharmacy claims costs on their workforce.

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

Slide 43 ... We analyzed what we call gaps in care, and for instance, in that population, there were 1638 people that had diabetes. Well, 525 of those had not had a hemoglobin A1C test in the last 12 months. So this helps target and know who to reach out to in working with them to see their physician and close those gaps in quality.

Slide 44 ... As an example, there were 299 people for whom we had medical/pharmacy claims data for one year prior to their intervention of being on the diabetes care management program, and then those data after three years on the program. You can see a dramatic reduction in hospital inpatient days per thousand and per member per-month costs.

Slide 45 ... In fact, when you look over time, the three-year cumulative cost savings, even after taking into account the cost of the diabetes care management program, the three-year cumulative savings was \$5.6 million on 299 people with diabetes. And think how much those people appreciated not having to be in the hospital as much either.

Slide 46 ... So in summary, again you will get the slides and can look at it in more detail, but I think there are unique features and benefits for each stakeholder related to population health management—for the member patient, for the employer, for providers, hospitals, and for public-private partnerships. The overarching issue is that population health management, when it is done well, and is evidence-based and comprehensive, would help reduce the burden of risk and illness in our entire society. It would help unleash financial and clinical resources through the enhanced capacity of physicians and hospitals. It would help improve the health and performance of our nation's workforce; it would help lower health care costs and, ultimately, enhance the vitality of our nation's economy. I wish you well, and now I will turn it over to Dr. Jeanette May.

Slide 47 ... Thanks, Ron, and thank you to the NDEP program for their leadership role in this topic, and thank you to everyone on the call today. I will say that there are a lot of folks on the line, and that is so exciting to see so much interest in the topic of population health and public-private partnerships.

My name is Jeanette May. I am going to spend the next few minutes talking about population health, a culture of health, and public-private partnerships. Ron really focused on—and I thought the data was amazing—on the effects of poor health—I really love the iceberg slide. I'm going to focus more on the value of good health and how bringing multiple stakeholders together can really enhance that. I have been actually involved in public-private partnerships and healthy community efforts for probably over 20 years. Most recently, I have been honored to be named the principal investigator for a Robert Wood Johnson Foundation grant that was given to the Health Enhancement Research Organization, more informally known as HERO. So HERO is a research think tank that is really focused on health and wellness in the employer space. But, as we all expand our thinking around population health, so has HERO, which has really moved forward and expanded its initiative into a couple of new areas around healthy workplaces and healthy communities.

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

I will spend a few minutes talking about those initiatives, but first, why are we expanding the way we think? Well, it was clear from Ron's slides and the information that he was able to share with us, that there is a good reason to think differently about population health and to look more at a holistic view that really kind of lends itself to collaboration. I was really excited that Ron mentioned Dee Edington and some of the work that he has done in the area of health and wellness. As you know, Dee has spent decades working in this space, and I was looking at some blogs this morning, and I saw that Dee just hosted a blog. I don't want to share the whole thing because it's quite long, but it's about health and wellness and the direction that we're all taking with this holistic view of population health. I do want to share a verbatim quote that comes from that blog. Dee goes on to say, "Wellness works, so does wellbeing and culture in collaborative ways. We believe in collaboration, not competition, evolution, not revolution, and cooperation, not going it alone." I think that's really important when we look at this health care landscape and as we begin to recognize the value of public-private partnerships in creating a healthy climate and culture and the impact that this healthy climate and culture can have, not only on individuals living, working, and playing in that community, but other stakeholders who also live and work in the community as well.

Slide 48 ...So the diagram here that I have in front of you represents all stakeholders that touch and influence a community and that community's health and wellness. This was taken from the county health rankings, which is an initiative also that was supported by Robert Wood Johnson Foundation. And it's clear here that there are many, many stakeholders that touch and influence the health and wellness of a community, and I think that's really important to understand. And as Ron's last slide pointed out, there's value not only to those community members of creating a culture of health and wellness in a community, but there's also value to all of those stakeholders around the circle here.

A great example is, up to the left of the slide 48, you see "health care". Clearly, health systems that are located within communities and are engaging employees who live and work in that community want healthy employees in their workspace. But also, they would probably benefit from healthier patients coming in as well. There's a healthy patient coming in with less comorbidity and less risk, it's very likely that patient will recover from whatever they're in the hospital for quicker, with less complications. And we can use that same scenario really for any of the stakeholders around this diagram.

Slide 49 ... As I talked about earlier, I think as we speak about population health and about expanding our holistic view, it's really creating an evolution for many of the stakeholders represented on this slide.

I thought this next slide was a great example of an evolution for one of those stakeholders. This is the business case development and evolution for employers and businesses engaging in community health. At the very left is the lowest level, years ago, employers engaged in community health from a compliance-driven [perspective], but to the right of the evolution, we

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

see businesses actively engaged in healthy community efforts that benefit the community, but also, as Ron clearly showed us, also drive or enhance that business's performance. So I think it's really important to understand that all stakeholders—as we expand our thinking around population health—are going through a similar evolution. Certainly, public health, which was represented earlier in the last diagram, is going through its own evolution as it's seeing a more holistic view of health in the populations that they serve, and how this lends itself, again, to collaborations with all stakeholders living and working in that community.

Slide 50 ... So, as I mentioned earlier, I'm the principal investigator on a Robert Wood Johnson Foundation grant, with HERO, that really looks at the culture of health in communities across the country. One of the first things that we did was to do a scan of the environment to understand what kinds of public and private partnerships are going on throughout the country and how they're engaging and what kind of impact that we have. I think what we learned very quickly was that the idea of and the potential of public-private partnerships are prevalent in many, many initiatives, even beyond the work that we're doing at HERO with RWJF. I've tried to present some of these efforts that we learned about through our environmental scan and through other ways that we've looked at healthy community efforts.

I want to chat about just a few of these, but I would encourage folks who are on the phone today to go and look at the different websites for a lot of these entities, because there really is some amazing work going on in the public-private partnership space. Toward the top, there is the Robert Wood Johnson Foundation culture of health, and that is part of our own work within HERO. So Robert Wood Johnson has focused its efforts around the culture of health and is looking at ways to enhance a culture and climate of health in communities so that individuals living and working in those communities can make healthy choices and that the healthy choice is really the easy choice for those individuals. All of us really are in the health and wellness space, and making the healthy choice is not an easy thing. I love the picture that Ron showed earlier of the individual walking his dog while driving a car. It's not easy to make healthy choices.

I've got a great example. I live in a very, very rural area in the Midwest. As is typical of small, Midwestern towns, we see about six months of cold weather, and we have a very aging population. As a result, we have older adults who cannot find a place to get out and exercise or take a walk on a regular basis, especially during those six months of the year when, literally, we see temperatures of 30 below and more.

So the public health department got together with the business coalition and a few other folks in town to figure out how we could tackle this problem in a collaborative way, recognizing that we're a small Midwestern town with no malls—so mall walking is out of the question. We have no YMCA. We do have a workout facility, but that costs money and many older adults are on fixed incomes. So lo and behold, through these collaborative efforts, public-private partnerships, bringing businesses in the community together with public health and the local hospital, we started chatting about other venues where older adults could walk, again, making the healthy

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

choice the easy choice, making the choice to exercise easy for these older adults. Through a lot of discussion and a lot of collaboration, we created a partnership with some of the local large home improvement stores where they have very big aisles, they have very long hours, and we found that five times around the home improvement store is about a mile. So we invited the retirement center's older adults to come and do walking clubs within these home improvement stores.

So even though that's a small example, those are the kinds of things that we have seen across the United States—public-private partnerships coming together to solve problems and to make the healthy choice the easy choice for folks living and working in communities. That is just one example. Let me talk a little bit about—down there toward the left of the slide, on the bottom, is the Clinton *Health Matters*. Clinton Foundation is working with, I believe, five or six communities across the United States developing very strong public-private partnerships to enhance the health, culture, and climate of communities that all look very different. It's an amazing initiative, and I would encourage everyone to go to their website and check out what they're doing.

There is the Institute of Medicine's Population Health Roundtable that is really exploring this holistic view of population health and what it means for our health care landscape. I think some of the reports that have been coming out of the Roundtable have really helped us not only understand what is really included in population health, but also how important it is to come together as a multifactorial stakeholder group and tackle population health issues on a broader scale.

There's also a lot of work going on—some folks may have heard of Bluezone Prevention Partners. They also work in small communities looking at wellbeing and prevention and trying to help folks find the right partners to move forward. My goal in showing this was to help you understand that this is really a movement, a movement toward enhancing health at a population level through public and private partnerships and that it's a win-win for everyone. I think some of Ron's slides, especially the last slide that he had, really demonstrated the value to those stakeholders engaging in these initiatives.

Slide 51 ... As I mentioned earlier, the Health Enhancement Research Organization has several initiatives currently going on in this space. I want to talk about a few of those. The first one is healthy workplaces and healthy communities. The goal of this topic is to create a website that will offer lots of really great information to employers and to other stakeholders interested in engaging in these kinds of efforts, culture of health and healthy community efforts. This is the landing page for this new website. The website is not live yet; I believe it will go live very shortly. The goal of this website is to offer best practices, case studies, some thought-provoking discussions, and a lot of really great resources that will help employers and other stakeholders to come together to work on healthy community efforts.

When we were doing our environmental scan, we saw so many great resources that really would help folks become engaged and really have an impact through these kinds of efforts, things that come out of the Federal Reserve, the Collective Impact Model, and so many others. One goal of this website is to bring all those great resources together, almost as a one-stop shop, so that folks can take a peek at everything that would help them enhance their current collaboration or create some new efforts within their communities.

Slide 52 ...The second initiative, and the one that I am spearheading as the principal investigator, is a process that looks at exploring the role of measures in culture of health efforts around the country. This is our work, HERO's work with Robert Wood Johnson Foundation, and it's a three-phase effort. The first phase of the project, and I touched on this a few minutes ago, was an environmental scan of what's currently going on in the health care landscape around public and private partnerships to address healthy community efforts and culture of health efforts across the United States. We had an opportunity to see so many amazing efforts and to meet and chat with so many great folks from all different stakeholder sectors about how they're engaging in these efforts. And we put that together in a pretty comprehensive report that gives the lay of the land on what's going on in culture of health and healthy community efforts across the country. That is available on the HERO website and I also believe it's available on the Robert Wood Johnson Foundation site as well.

Through that first phase, we were able to identify subject matter experts who were working in these efforts and had a sense of what worked well and where they were struggling, or where there were challenges or barriers. Our goal was to take a look at the measures because, ultimately, we want to identify measures that resonate with all stakeholders in these efforts. We want to help to engage those stakeholders early on in the process of creating these collaborations and then creating measures that will encourage those stakeholders to stay through the implementation and add value to the collaboration but also to that individual stakeholder's organization as well. And so, through our environmental scan, we identified three groups of subject matter experts. We worked very iteratively with those SME groups to bounce ideas for measures off of those folks and tweak those measures, so that at the end of our second-phase report we had a series of measure concepts that could be used in culture of health and healthy

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

community efforts to initially engage employers and other stakeholders in these efforts, but also could be used to measure the impact of those efforts. Those measures would specifically resonate back with the employers and the other stakeholders.

We did find that there were challenges in engaging all the stakeholders, especially when there wasn't a common language, and that measures that were currently used in these efforts didn't resonate with stakeholders around the table. So we clearly see this as an opportunity to enhance public-private partnerships and help move the entire effort forward. That second report has just been completed, and we are entering phase three of our work with the Robert Wood Johnson Foundation now.

Our phase-three work is to begin to informally test the measure concepts that we identified in phase two. These are concepts that can be embedded in culture of health and healthy community efforts to help those efforts engage multiple stakeholders across the board. We are going around the country, interviewing different sites, and asking folks to work with us to informally test these measure concepts. So hopefully, by the end of the year, we'll have a final set of measures that these healthy community public-private partnerships can utilize as they're engaging stakeholders and moving forward in their efforts to create healthy cultures and climates in the communities where everyone lives, works, plays, and prays.

We're very excited about our work with the Robert Wood Johnson Foundation, and I think it's exciting that HERO has partnered with RWJF and so many others to help move this work forward. I can't thank you enough for taking time to listen and hear about our work. Please visit our website and see some of the great reports that we have been creating as a part of this work. I think I will hand it back to Pam now.

Slide 53 ...Thank you so much, Dr. May and Dr. Loeppke. Now, I want to talk about some of the resources, and we will also have time for some questions and answers as well. NDEP has developed many resources for people with diabetes, for providers, and for consumers, and everything is in the public domain. We would love for you to come visit our website.

Our first website is the *Diabetes at Work* website, and let me repeat that all of these slides and recording of this presentation will be posted on the *Diabetes at Work* website as well as the general NDEP website. We have some clearance issues at CDC, so it may be a couple of weeks, but we will be sending all of the participants a link as soon as these slides are posted. The *Diabetes at Work* website actually is 10 years old. It was established because folks said we needed to unite the world of diabetes care and the world of the worksite and businesses, because at that time there really wasn't anything that spoke to the needs of folks at the worksite.

So then a couple of years ago we said, "Well, this needs a major revision." So we asked a whole bunch of experts in many different sectors to help us. As I said, Dr. Loeppke was the chair of this. They brought us topics, they brought us things that we wanted to cover, and we'll go over the details in a minute. This is one website we would love for you to go to, the [Diabetes at Work](#)

website, and give it a spin. The other is the general National Diabetes Education Program website, where you can find all types of materials on topics from behavior change to nutrition. We have information for providers. We have all types of tear-off sheets to educate consumers, let's say about their eyes, about their teeth, about their feet, etc. So we would love for you to come visit.

We also have a website about the primary prevention of diabetes. As Dr. Loeppke mentioned, we can prevent type 2 diabetes in folks who have prediabetes, folks who are at very high risk. We also have to remember that prediabetes is a risk factor for cardiovascular disease, as well. So please come and visit our general resources website, as well.

Slide 54 ... Here is our *Diabetes at Work* website. As Dr. Loeppke mentioned, depression is one of the major contributors to decreased productivity. We just happen to have on our *Diabetes at Work* website a continuing education (CE) program. Somebody asked if there was CE credit for this presentation, and no, there's not. But there is a presentation on diabetes and depression at the worksite that does offer continuing education credit, and you can access it through the diabetesatwork.org website. I wanted to bring that up because that was a question we received in the chat.

If you look at the *Diabetes at Work* website, we tell people, what is the website for? What do we want people to find here? It's a resource for things from CDC National Diabetes Education Program, but we're also trying to be almost like a clearinghouse to connect people with other programs such as NIOSH, the National Institute for Occupational Safety and Health. CDC has a National Healthy Worksite program, as well. So we have compiled many links to help people look at various resources that can help them either establish a program at their own worksite or have resources for programs that are already established.

When we asked the folks who registered how they got materials, many said that they worked with contractors, with vendors, some said that they get their resources online, and some actually have occupational medicine professionals onsite. This website can help everybody because it will have resources that you can download and you can even put your own logo on if you would like to. We will be continually updating it with news articles, new numbers, etc.

Slide 55 ... We have resources, like a "game plan" fat and calorie counter that's very popular. People want something so that they can track their progress. We have lesson plans about foot care. We have lesson plans about nutrition. We will be developing more lesson plans with the occupational health nurses to serve their needs, as well.

We also have a new feature, *Ask the Expert*. Our stakeholder group folks are very loyal, and for the past 10 years every question that has come into *Diabetes at Work* has been answered by a real person. So if you do have questions, eventually somebody will answer those questions.

Slide 56 ... We have information about diabetes basics, from the definition of diabetes, how to prevent type 2 diabetes, the emotional health of folks with diabetes, and also diabetes in

pregnancy, because at some worksites that might have a lot of women of childbearing years, certainly diabetes during pregnancy, gestational diabetes, is an issue. We have information about that as well.

Slide 57 ... We have materials so that you can plan a program. You want to understand your environment. You want to make a business case. There are resources there for you.

Slide 58 ... We want to help you build your worksite wellness program. So how do you develop a culture of health? A culture of wellness? What are some program activities that you can do, and how can you connect with the community as well? So we would really love for you to go on to the National Diabetes Education Program's general website and the *Diabetes at Work* website and just navigate, explore, and see what you can find.

Slide 59 ... Questions and Answers ... So, I would like to start out with some of the questions we have received. The first question is "How do you measure presenteeism?" I believe Dr. Loepke brought that up. "Presenteeism" is when people are at work but they are not performing at 100 percent. So I'm going to turn it over to Dr. Loepke.

Dr. Ron Loepke: Thank you, Dr. Allweiss. There are actually several validated instruments, questionnaire tools that have been shown to effectively measure presenteeism. There are different ones. One is from Dr. Ron Kessler at Harvard Medical School; the tool that he put together, along with the World Health Organization, is the HPQ instrument. It stands for the Health and Work Performance Questionnaire. There's also a tool by Dr. Kim Pelletier called the Stanford Presenteeism Survey (SPS), as well. Another one, by Dr. Deborah Lerner from Tufts University, is called the Work Limitations Questionnaire, the WLQ. And there are others. These have been tested and validated with some objective measures of workplace performance and have been shown to be very effective measures of the impact of presenteeism that an individual is experiencing. Then you can see how various populations, over time—sometimes pre-/post-intervention of an initiative—could be measured in terms of presenteeism impact. So, unless there're other questions, or you have other input, Dr. Allweiss, I'll leave it at that.

Dr. Pam Allweiss: That's perfect. In the *Diabetes at Work* web site we do reference a couple of those, but we will collect these and we will have the direct links for everybody. So afterward, Dr. Loepke and I will compile these links for everybody and we'll put them under the presenteeism section.

The next question is "Would you speak to the lexicon challenges among stakeholders so that communication is optimized." I guess that's asking about some of the barriers that folks might have—that communities and worksites might face. I'll turn it over to Dr. May.

Dr. Jeanette May: Great question. I think that's a really interesting question as well. I took it to mean "How do we overcome the language barriers that exist in these kinds of collaborations?"

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

The reason why I think that way is because we, actually HERO, convened a variety of experts to talk about challenges and barriers in creating the business case for stakeholders to engage. One of the findings of that convening was that language is a challenge when you bring lots of different stakeholders together. So I have a master's in public health and I actually teach public health for a master's program at a university, and I also, early on in my career, worked in a large integrated delivery system. I can tell you, the language that is spoken in a health system, the language that is spoken in a public health department, and the language that is spoken in an employer setting are all very, very different.

We interviewed different healthy community efforts around the country and we asked them “What are the challenges that you face when you try to bring stakeholders together?” The number one concern was the idea of, “We think this is a good measure, but they [other stakeholders] don't get why this is an important measure.” It wasn't so much about the measure as it was about the language.

I do believe—and there's a lot of really good research out there on this topic—I really do believe that measures can work to rally the troops around a common goal, a common language. I think that's why HERO was so excited to receive the grant from Robert Wood Johnson. Because we do believe that the right measures, ones that truly resonate and are able to be understood by all the stakeholders around the table in these efforts, really will rally the troops. They will eliminate a lot of those language barriers that these stakeholders face when they come to the table with different views and different ways they think about things. So great question, thank you for that.

Dr. Ron Loepke: Thank you for that response, Dr. May, and just to add, it stimulated the thought that really, in work—I've had an opportunity to do meetings across different stakeholders, so talking with employers or hospital health systems or health insurance companies or individual patients and consumers and my practice over the years, these other public and health department, public-private partnerships—a common framework that I hear resonate is what Dr. Don Berwick talked about in terms of a triple aim for our nation in terms of health. I think everyone is familiar with that, but in essence, the triple aim that he talks about is the fundamental underpinnings of population health management. That triple aim is 1) better health for the whole population, 2) better health care for those who have conditions that need care, to generate better value, higher quality, and 3) lower cost. When we think of all the different stakeholder roles, that's a very common language and framework and a laudable goal that each would benefit from, whether they're an individual, a family, an employer, a community, a state, or our nation.

Dr. Pam Allweiss: Thank you. That was a wonderful summary. We do have two more questions. For Dr. May, “What were the three areas you identified in phase two of HERO?”

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

Dr. Jeanette May: Great question. These are measure concepts, so they are more areas than they are actual formal measures. They are in two buckets—one bucket has those measures that incentivize folks to come to the table initially, and then a bucket for those measures that encourage them to stay.

I will say that the first bucket focuses on measuring—demonstrating commitment, having the right convener, and understanding the strength of the collaboration and the commitment to the collaborative effort, as well as to health and wellness, in general.

Then the other bucket, which are some of the measures that Ron touched on in his presentation—what are those measures that resonate and hold value for all of the stakeholders at the table? We do believe that those vary based on the needs assessment and the goals identified by those community collaborative efforts, but ultimately they are about those high-level quality-of-life, productivity, safety, and performance themes, and some were in between. They're about who in the community and who among those stakeholders is committed to health and wellness and about how can we utilize those employees to become advocates and champions in the community effort. But again, they're concepts right now, and that's what we're exploring. I would definitely say check back on the HERO website like the third quarter of this year and we'll have a lot more details for you on it then.

Dr. Pam Allweiss: Thank you. And we will also post the HERO website on the national *Diabetes at Work* website as well.

We have two questions. “Do you have any curriculum for chronic disease management population base?” Definitely www.improvingchroniccare.org, Dr. Ed Wagner's program, has a lot on the chronic care model and you can find information there.

Another question is “Is there a benchmark for developing a results-oriented program that can definitively measure change through data to demonstrate to stakeholders?” Because this is very important, both of you can answer that. Whoever wants to go first, take it away.

Dr. Jeanette May: Ron, be my guest.

Dr. Ron Loeppke: Okay. One follow-on thought to the prior question about chronic disease management, population health management. There are some great resources out there. The American College of Occupational and Environmental Medicine does have educational resources and even some training curriculum around health and productivity management and population health management and will have increasing levels of resources in the year ahead. In addition, there's a textbook on population health management. It's on one of my slides. So when it comes out, the reference is on there, but it's called, *Population Health: Creating a Culture of Wellness*. Dr. David Nash is the editor-in-chief of that book. Those are a couple of thoughts.

NDEP
Population Health Management:
Improving Health Where We Live, Work, and Play

In terms of benchmarks, just one that I would offer as a reference for later—it has a compilation of other references built into it—is a published article that came out in September. Dr. Ron Goetzel was the lead author. I happen to be one of the coauthors as well, but many people put that together. The title of the article was, “Do Workplace Wellness Health Promotion Programs Work?” It’s in the *Journal of Occupational and Environmental Medicine* and I will make sure I give you that, because it helps establish the kind of benchmarking and the kind of data elements and metrics that are encouraged when you try to evaluate the impact of any pre/post intervention. So with that I will turn it over to Dr. May.

Dr. Jeanette May: Sure, just to add that, from a community perspective I do think that this is something that we are working on, and I showed the landing page for the HERO Healthy Workplaces, Healthy Communities website. So no formal benchmarking exists, unless you look at county health rankings from a community perspective, but I do believe that HERO is working toward creating a database, if you will, of best practices and comprehensive case studies that will give the underpinnings and the framework of some successful programs. We hope, with measures included as well, that folks can use these to demonstrate to stakeholders, “This works. We think we’ve got it right. Come on board and lend us a hand.”

Dr. Pam Allweiss: Thank you so much. Our time is up. I want to thank our speakers. I want to thank our audience, and I want to thank the National Diabetes Education Program. Please fill out the survey that you will receive immediately after this call. It helps us improve all of our programs. If you do have any other specific questions, please email me. My email is on the last slide, pca8@cdc.gov, and we will have one of our speakers answer the questions. Thank you so much, everybody.

[End of webinar]