

CDC Town Hall Teleconference
Getting Blood Pressure Under Control
Transcript

September 11, 2012
2:00pm – 3:00pm EDT

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. During the question-and-answer session please press star 1 and record your name as prompted. Today's conference is being recorded. If you have any objections, you may disconnect at this time.

I would now like to turn today's meeting over to Dr. Rich Schieber, *Vital Signs* Program Coordinator. Thank you. You may begin.

Dr. Rich Schieber: Thank you. Good afternoon. I'm Rich Schieber, and I have been the program coordinator for CDC *Vital Signs* since its inception in July 2010. And I'm particularly glad to join you today. This is the first time I've been able to moderate such a session, although I regularly listen into them. And I'm very glad that we'd started to have these dialogs, because they're quite meaningful to us and to the program.

Before we get started, let me go over some housekeeping details. First, remember to go online and download today's PowerPoint presentation so you can follow along. Second, our Web address - and I'll give it twice - is www.cdc.gov/stltpublichealth, all one word. So it's www.cdc.gov/stltpublichealth, and there's a link directly to the Town Hall Web site under the highlighted products and resources on the bottom right you can see there.

And thirdly, on this page you can also view the bios for each of the presenters, and this is where we'll add the audio recording and transcript for today's meeting once we have it. Should be available next week.

So with that, let's begin. Today we're here to discuss the latest *Vital Signs* report, which focuses on controlling blood pressure. With high blood pressure at least tripling the likelihood of dying from a heart attack or stroke, the importance of addressing this top public health issue is paramount. Most people with uncontrolled high blood pressure know they have it, see their doctor and take prescribed medicine. Of course each of these is important, but there's more we can do to help patients better manage this condition and even avoid it through effective prevention measures.

One way is to strongly support the National Million Hearts Program dedicated to preventing 1 million heart attacks and strokes by 2017. We'll learn more about this program during the call, including how it's designed to garner the participation of pharmacists around the country.

As a preview, on today's call we'll hear from colleagues in Wisconsin and South Carolina who will share how they have yielded significant results in the battle against hypertension. First, we'll hear from Dr. Amy Valderrama, a PhD in nursing who is an epidemiologist in the CDC Division of Heart Disease and Stroke Prevention within the National Center for Chronic Disease Prevention and Health Promotion. She'll provide a summary of this month's *Vital Signs* report.

Dr. Valderrama will then hand the call over to Dr. Christopher Tashjian, and he is a medical physician and president of the River Falls, Ellsworth and Spring Valley Medical Clinics in Wisconsin. He will discuss how electronic medical records can be used innovatively not only to educate patients about

their condition but actively engage them in effectively managing and even countering its effects.

Third, we'll hear from Joy Brooks, Masters of Hospital Administration, who is the director of the Heart Disease and Stroke Prevention Division in the South Carolina Department of Health and Environmental Control, Bureau of Community Health and Chronic Disease Prevention. And Joy will be our final presenter today. She'll tell us how her state went from worst to first in reversing its cardiovascular mortality ranking, and she will also share how her team is making the most of outpatient quality improvement.

After that there will be time for questions from the - after the presentations, there will be time for questions, but you can get in the queue to ask a question at any time during the conference. Just press star 1 and record your name when prompted.

So with that, let me turn the call over to Dr. Amy Valderrama. Thank you.

Dr. Amy Valderrama: Thanks, Rich, and good afternoon everyone. Today I'll highlight a few key findings from the recent *Vital Signs* report shown here on Slide 5 and provide a brief overview of why blood pressure control is important and so challenging to achieve, the number of U.S. adults who have uncontrolled hypertension and what can be done to improve blood pressure control.

The next slide. Hypertension or high blood pressure is a major risk factor for heart disease and stroke, costing the national almost \$131 billion annually in direct medical expenses. In 2008 hypertension was reported as a primary or contributing cause of approximately 348,000 deaths in the U.S., which is nearly 1,000 deaths each day.

Even modest elevations in blood pressure increase the risk for cardiovascular disease and mortality. Adequate hypertension control can reduce the incidence of heart attacks and strokes, heart failure, kidney disease and save lives. In fact, 46,000 deaths might be averted each year if all patients with high blood pressure were treated according to current clinical guidelines.

Next slide. Despite the benefits of hypertension treatment in decreasing mortality and morbidity, blood pressure control remains low. Barriers to blood pressure control can be related to the patient, the healthcare provider or the healthcare system.

One of the major challenges with blood pressure control is that the disease usually has no signs or symptoms. A person may have high blood pressure and not even know it, and because they have no symptoms, they may not understand the need to take medications regularly to control their blood pressure.

Healthcare providers may not have resources for using a team-based care approach and may have other challenges for providing optimal medical management, such as a lack of training or experience in controlling blood pressure and a lack of knowledge of treatment guidelines. Healthcare systems may not have health insurance - health information technology in place to provide clinical decision support or to notify providers when a patient has been seen by another provider and has an elevated blood pressure.

And lastly, resistant hypertension is hypertension that's not controlled using a combination of three antihypertensive drug classes. This represents close to 9% of adults with hypertension. These people are taking three or more medications, yet their blood pressure is still uncontrolled.

Next slide. This *Vital Signs* report found that nearly one-third or about 67 million adults in the U.S. have hypertension. We further divided that group into those whose blood pressure is controlled or uncontrolled. Uncontrolled hypertension is an average systolic blood pressure of 140 or greater or an average diastolic blood pressure of 90 or greater among those with hypertension. 35.8 million adults or about 54% of those with hypertension have uncontrolled hypertension.

Next slide. Looking at this table, you can see that lack of health insurance, lack of a usual care provider or lack of receiving healthcare in the past year are not necessarily the problem. 32 million of the 36 million adults with uncontrolled hypertension have a usual source of healthcare. 30 million have health insurance and about 26 million have seen a healthcare provider at least twice in the past year.

Next slide. Next, we looked at three subgroups of people with uncontrolled hypertension. There are approximately 14 million adults who are unaware that they have high blood pressure. 5.7 million are aware of their high blood pressure but are not taking medication for it, and 16 million adults are aware that they have high blood pressure and are being treated with medication, but their blood pressure is still uncontrolled.

Next slide. So what can be done? This *Vital Signs* report demonstrates that we have room for improvement in blood pressure control. There are many opportunities to work on blood pressure control. We know what to do and how to get blood pressure under control. This is going to require patients, clinicians and healthcare systems working together and making it a priority.

Next slide. Hypertension control is an important component of the Department of Health and Human Services' Million Hearts Initiative which

aims to prevent 1 million heart attacks and strokes by 2017. In order to achieve this goal, Million Hearts is working to improve hypertension control for 10 million Americans.

Next slide. Team Up, Pressure Down, a new Million Hearts' educational program was just launched last week on September 5th. It's a pharmacy-focused program aimed at improving blood pressure medication adherence and hypertension control. The program promotes team-based care and offers support for pharmacists in providing education and counseling to patients with high blood pressure.

Next slide. To improve blood pressure control healthcare systems can use electronic health records and patient registries to automatically notify healthcare providers of patients who have had high blood pressure readings. These may - these readings may have been with another provider in the system. Doctors, nurses and others can regularly review patient records, looking for patients who need more attention to control their blood pressure.

The healthcare system can create system-wide targets using Healthy People 2020 objectives for blood pressure control and provide feedback to providers on their success. In addition the healthcare system can make it easier for patients to stay on medicines by considering 90-day refills for patients and no or low copayments for medicines. When a healthcare system makes such a concerted team effort to achieve blood pressure control in all its hypertensive patients, the number of patients who gain control of their blood pressure goes up dramatically.

Next slide. Healthcare providers can use a number of strategies to improve hypertension control. They can flag and monitor patients with high blood pressure or who are at risk for having high blood pressure as well as report

their progress on blood pressure control. Providers can counsel patients to use their blood pressure - to take their blood pressure medicines and to make healthy lifestyle changes.

They can regularly evaluate a patient's blood pressure medications to determine whether changes need to be made and consider simplifying their treatment regimen with fewer and once-a-day dosing when appropriate to improve adherence.

They can also address every high blood pressure reading by talking with the patient about taking prescribed medicines, adjusting current medicines and encouraging lifestyle changes. Providers can use innovative care models in their practice such as team-based care to improve blood pressure control.

Next slide. Finally, everyone can take prescribed medicines each day. If your blood pressure is still not under control or if you have side effects, you can talk with your doctor, nurse or pharmacist about possibly changing your medicine.

Measure and record your blood pressure readings between medical appointments and keep your healthcare providers informed of the readings. Everyone can work to maintain a healthy weight and meet the physical activity guidelines for Americans, follow a heart-healthy eating plan with foods lower in sodium and stop smoking.

Next slide. In summary, we'd like to remind everyone of some of our key messages. Nearly one in three American adults have high blood pressure and more than half of them don't have it under control. As Dr. Frieden has said, we need to roll up our sleeves and make blood pressure control a priority every day with every patient at every doctor's visit.

The key to successful control is persistent focus by every member of the healthcare system, doctors, nurses, nurse practitioners, physicians' assistants, office staff, pharmacists and others as well as the patient himself. For patients and the healthcare team a lifetime of focused attention to their blood pressure and its treatment is needed. Our collaborative efforts can make a difference in improving blood pressure control.

Next slide. I'd like to acknowledge the many people without whom this *Vital Signs* report would not have been possible. And now I'll hand the presentation over to Dr. Chris Tashjian. Thank you.

Dr. Christopher Tashjian: Thanks very much. As I said, my name's Chris Tashjian. I'm a rural family doctor, practices in a town of about 2,000 people with a patient population of our clinic with - of - there's two physicians, a PA, and we service about 5,000 to 10,000 people in the surrounding community.

So let's move to Slide 21. It talks about the Ellsworth Medical Clinic. We're your average small-town America, you know, small clinic, rural practice - rural-based practice. Most of our patients are either in farming or commuted to the bigger city, the Twin Cities, which is about 45 minutes west of us.

We made a decision about four or five years ago that we were going to change our practice and have it all centered on the patient and make this really a patient-focused process. By doing that, we realized the only way we could do that was to make quality care a team sport. And by that, what I mean is that everyone is involved, whether it's the person at the front desk who makes the appointment to the lab tech who draws the blood to my medical assistant who rooms the patients to the providers that actually see the patients and any follow-up care.

And we use all of these people to their fullest extent. So when we did it in the paper world, we were able to move our care up to - from good to better, and we were roughly approximately 70% - 75% controlled. And - but even doing that and having everybody involved and using low-tech things like one of the low-tech things we used is my medical assistants will put a red construction paper magnet on my door or on the door of the patient if their blood pressure is elevated.

So even if they're there for a sore throat or they're there for something completely different from the - their hypertension, we address it each time. And she brings it to my attention to make sure that I don't overlook it. And with that we're able to bring it, you know, make substantial improvements.

But in 2010, we added the electronic medical record, and we used Cerner's ASP model. And ASP really means that they house and do all of the technology. Our access is through the Internet. So again, I told you, we're your average small-town American clinic. We don't have access to IT and all of that.

So this ASP model works really well for us, and what's changed now is we use our electronic record to actually proactively monitor patients. So once a month we go in and we look and see who's controlled and who's not, and we can query the electronic record so that if patients aren't coming in, we can actually reach out to them.

Next slide, Number 22. So my medical assistant does a pre-visit chart review. The laboratory technician will look ahead of time, and say, "Does this patient need any tests?" For example, if it's been more than a year since they've had a

basic metabolic profile and urine for microalbumin, they're empowered to just go ahead and take care of it. I don't need to do that.

I talked a little bit about the exam room magnet for blood - for the blood pressure alert. Again, that's a very low-tech thing that works pretty well, and we empower all of our clinical staff to order the lab tests. So all of our clinical staff can tell you whether it's the lab tech or the medical assistant, and I'll be honest with you, as a small-town clinic, we don't have RNs. They're not around for us to hire, and even if they were, you know, it just - we're just not available.

So everybody orders the lab tests. So again, my laboratory med tech, again, will look and say, "Gee, I see that you haven't had this done. While I'm doing this, you know, drawing blood for one reason, let's go ahead and take care of these others." So what it does is it keeps us up to date.

Next we use our MR to print visit summaries and follow-up guidance. So every patient that leaves my room when I've seen them, I print a summary of what was their current blood pressure. They know what their goals are, and we have a plan of what we're going to do about it. And I have a lot of elderly patients, so it's really good for them from the standpoint of the children ask, "What happened in they - what happened in the doctor's office today?" They can hand them this printout, and the instructions are very clear.

Or sometimes what happens to me is I go back and I say, "Now what did he say," or, "What did they say while - for our patients?" Now they actually have something in writing. So it saves our staff from having to have people call back in and say, "I can't remember what the doctor said," because we write it down for them.

Also on this After Visit Summary, it says, “When do I want to see you next?” You know, if you’re under control, it could be six months. It could be as long as a year. If we’re having problems, it could be as early as two weeks. And so that - that’s there in black and white, and because it comes off the computer, and I didn’t write it, people can actually read it.

The next thing we do, and we’ve actually done this and been fairly successful is we allow our patients to come any time, any day, any time our doors are open, they can come get a blood pressure check. It doesn’t cost anything. They don’t have to make an appointment. They can come. We’ll put it in the system, and we’ll deal with it when it’s better for them or when we do some of this proactive management that we’re talking about. And in a little bit, we’ll go over that proactive management.

But as I said, if you’re a patient in our clinic, you can - if you’re coming to this grocery store or you’re just running up town to get gas, you can always stop by the clinic and get your blood pressure checked by a real person, not a machine. And then it gets entered into the system, so we can deal with it.

Okay, next slide. So what do we do with our EHR? What have we done, you know, because as I said, we’re not real technology savvy people? But what we were able to do is we were able to go into our EMR and say, “Okay, show me all my patients that have high blood pressure.” Or as you can look at it, there’s diabetes or ischemic vascular disease, and we can sort it by age or however we want it.

And then we use the EHR. One of the things we’ve done is we hired my former medical assistant to be a care coordinator. And so she will take these numbers, and the computer will actually tell us which ones are out of line and which ones aren’t.

So, for example, in this case, you can see that - you can see that somebody's blood pressure is highlighted at - that's too high will be highlighted in yellow, and we will go look at that patient and say, "Have they always been out of line?"

We can just click on those numbers and go into their chart and actually take - you know, get a graphical readout of what their previous blood pressures have been. So we know what we - you know, which ones to address. And again, one of the big advantages we have is that we know all our patients, so we know who's going to come in, who's not. It really is a big advantage.

Next slide. These are the patient score cards. We can print these out ahead of time when the patient comes in. So we can see what's needed and our nurse can see what's needed. Before they even come in we can have these available to say, "Okay, in this example the person needs an LDL." But if their blood pressure was too high, we could address that as well.

And so what it does is it focuses our care team on what are the most important concerns of this patient. And what it does though is that you really have to buy into is having blood pressure, cholesterol, aspirin, no smoking, are those really important. And everyone in our clinic believes that if it were me that had this illness, if I had high blood pressure, I'd want all of those checked. So we check all of those things at every visit, even if it's not a - the visit - even if it's not designed to be a high blood pressure visit.

The second thing you see - next slide- is we do provider score cards. So what you can see is I've taken out - I blotted out the providers' names, but - and they're not real names anyway. But either way we can look at it among our group, and as I said, we're a two-doc clinic, but we at least collaborate with

the group in River Falls and the other group in Spring Valley. And it's open communication. It's completely transparent. We know who's doing a good job at controlling blood pressure. We know who's not doing a good job and very clearly competition works in this case.

Next slide. So the results are in just four years we increased our - you know, our diabetes or our blood pressure control from 73% to 97% in people with diabetes. And patients with heart disease, hypertension went, again, from 68% to 97%. And in every single - in August of this year and every single patient that we have with blood pressure for the first time, we were able to get to the 90 percentile, which was a big - it's a big deal for our group. You know, the group really felt a sense of accomplishment, and so we were pretty excited about that.

And again, we're looking for ways to how do we do better. The next thing that we're going to add is I had told you, we hired these care coordinators. They're going to come in the exam room with me when I see the patient. So make sure that everything is - the patient understands what we're asking of them.

So again, what did we learn? It's patient-centered team approach. That's the only way it is. Quality is a team sport. Good medicine is a team sport. We use everybody on our team to their fullest extents. Patients do best when they're involved in their care and receive consistent messages from all of us. So they receive the same message over and over again. The patients are very clear as to what our expectations of them.

Finally, the electronic medical record is a great tool to manage data if we use it appropriately. We use it only to manage care. We don't do things with it that don't actively improve the quality of care that we use. So finally, you

know, and again, I would even a small clinic like ours can take advantage of an EMR if they use this ASP version.

So the next slide, you know, the real key here is be bold. Don't go into this saying, "Well, we're going to do a little bit here, a little bit there." We went into it and said, "We want better care. We're going to redesign our system. We're going to design everything around the patient." And if you do that, you actually could make great improvements and great strides in your care. Thanks very much.

Next slide, and again, if you have questions, I'll be free to answer them at the end or you can email me. And I'll turn it over here.

Joy Brooks: Right, thank you, Dr. Chris. And this is Joy Brooks and greetings from South Carolina. Thank you for the opportunity to highlight a successful public health partnership with the Outpatient Quality Improvement Network to reduce cardiovascular mortality and to save a million hearts and to certainly take South Carolina from worst to first. And you're going to learn a little bit more about that. It is a plan that works. It is work in action, and it can absolutely be deployed in other states, which is our vision for the future.

And we'll progress to the next slide, which is Slide 31. And in this slide you see South Carolina's improvement in cardiovascular mortality ranking versus other stroke-belt states from 1995 to 2008. And this is an illustration of what we mean by taking South Carolina from worst to first.

What you see is that in 1995, South Carolina was the 50th in the nation for cardiovascular mortality, and in 2008, its cardiovascular mortality rank improved to 33. South Carolina improved 17 points in national ranking during the last reported 13 years, more than double any other state in the stroke belt.

It is also the most improvement in rank in the nation. So how have we done this? Well we believe that it's a decade-and-a-half of concentrated quality improvement activity and our collective partnerships and initiatives statewide.

The next slide. This slide depicts OQUIN's work in action, which includes its mission, strategies and quality improvement techniques in clinical practice. OQUIN's mission is to promote health and to prevent cardiovascular disease across the lifespan. And its strategies include healthy lifestyles, promoting physical activity, good nutrition through effective healthcare with a laser being focused on the ABCs, access to care, access to appropriate medications and building trust, providing health - help and not being the quality improvement police.

And there are a variety of techniques that are employed to do this work in action. First is collecting data, showing practices exactly how they are performing, providing data by practitioner and by patient. Through business associates agreements, OQUIN maintains a central searchable database containing patient labs, medications and ABCs data, EMR data including blood pressure, lipids, aspirin and tobacco, information that can be used meaningfully.

Other techniques are innovate and improve patient outcomes, not just tests that were performed, but outcome data. Was the patient treated to goal, and if not, how do we get them there? Evidence-based practice and implementation of strategies, quality improvement reports, NCQA and BTE standards, including heart disease and stroke process metrics. And something near and dear to my heart are the training and the certification of hypertension specialists. Our heart disease and stroke prevention program has promoted this for years.

And something that South Carolina can boast is that we have more hypertension specialists per capita than anywhere else in the nation. And something we've been able to demonstrate through OQUIN data is that hypertension specialists are more effective in treating patients to goal than non-hypertension specialists.

Another technique is through the (QI Pro) program and comparative effectiveness research, and of course, measuring improvement through publication and symposiums where that improvement is celebrated and with useful and practical tools provided to the network providers.

And, you know, the beauty of this design is that it is scalable. It is affordable to implement over a broad population, because it's centrally hosted. It's maintained over a broad population and has a great deal of flexibility to work with all EHRs in a variety of practice settings and disciplines, all of which are in support of Million Hearts and how South Carolina is playing an integral role in getting us to those targets.

Next Slide 33. So what is the status of the ABCs and how this is going to impact a Million Hearts and where are OQUIN practices across that continuum? You see on this slide the U.S. population target is at 65, where we are with current averages, the U.S. clinical targets all at 70% for those patients treated in a clinical setting, and then where we are with OQUIN.

So for blood pressure, OQUIN practices have already exceeded the goal of 70% for Million Hearts 2017. OQUIN is at 73% for blood pressure. For cholesterol, we are at LDL control of 72%. For smoking, we are at 72%. And you see with aspirin, we have some data capture issues with aspirin. We believe that we account for that low percentage because the aspirin indicator is

not a prescription, so we are certainly working on that indicator to increase that metric of control.

However this slide illustrates that the accomplishments of three of the four goals of the ABCs have been achieved by 2011, six years ahead of the Million Hearts 2017 targeted time. And we are absolutely committed to achieving those ABCs goals.

Next Slide 34. So what this slide illustrates is OQUIN practices, control of blood pressure and cholesterol over just over a decade. And what we know is that the combination of hypertension and hyperlipidemia nearly quadruples the burden of heart disease and stroke and control of hypertension and hyperlipidemia reduce heart disease and stroke by 50%. So this slide depicts improvements in blood pressure control to less than 140 over 90 and LDL control separately and combined among hypertensive, hyperlipidemic patients in the network.

So in relative terms between 2000 and 2011, hypertension control improved by 56%, LDL by 78% and combined control of both hypertension and hyperlipidemia by 167% in OQUIN practices. So while substantial progress has been made, significant work remains, especially in obtaining simultaneous control of both hypertension and hyperlipidemia. So our partnership is committed to improving concurrent control of hypertension and cholesterol as part of our emphasis on the ABCs.

Next Slide 35. Now a distinct privilege to serve in an integral role in the writing of our CTG in South Carolina and bringing that award to our state, and because of our long history and our partnership with OQUIN, we brought in the talent, the expertise and the dedicated professionals of OQUIN to our

CTG to address the high quality clinical preventive services within what we now call the Healthy South Carolina Initiative.

And so this grant opportunity has been able to support the doubling as a part of the goal of our community transformation in South Carolina OQUIN sites from a baseline of 108 practices to 216, as well as increase the number of adult patients in OQUIN from 800,000 to 1.7 million and the number of pediatric patients, which we're very excited about, from 100,000 to 250,000 in South Carolina, as well as be able to increase the American Society of Hypertension designated hypertension specialists in South Carolina from 47 to 70.

So you see in this baseline graphic, the red established practices of 108 and the growth of current sites in this Year 1 with the blue illustrating the new adult practices and green illustrating the new pediatric practices, which increases our adult patient population by 200,000 and pediatrics by 150,000 pediatric patients. And we are just most delighted about the progress that we are seeing with this initiative.

And our last slide, Slide 36, I just wanted to highlight from 1995 to 2008, OQUIN has saved 7750 lives per year from cardiovascular mortality. We have made significant progress, and we are absolutely committed to saving a million hearts. And we can do this in other U.S. states as well to support the Million Hearts' objectives and to improve healthcare.

We would love to invite you to learn more about this partnership in our upcoming symposium, which will be held April 19 and 20, 2013th in Columbia - 2013 in Columbia, which is where I'm hailing from today. We are infamous for our southern hospitality. Come one, come all. And I'd also like to let you know that joining me on the line today from the faculty of the

Medical University of South Carolina and from OQUIN is Dr. Brent Egan, the senior medical director and Mr. Rob Davis, the executive director to helping.

Is there any questions that you might have about the network? And thank you again for the opportunity to share.