

MAYO AND ARIZONA STATE UNIVERSITY ALLIANCE FOR HEALTHCARE

**Moderator: Jim McVeigh
October 21, 2016
10:30 am CT**

Operator: Ladies and gentlemen thank you for standing by. Welcome to the Mayo and Arizona State University Alliance for Healthcare call. During the presentation all participants will be in a listen-only mode.

Afterwards we will conduct a question and answer session. At that time if you have a question please press the 1 followed by the 4 on your telephone. If at any time during the conference you need to reach an operator please press star 0.

As a reminder this conference is being recorded today, Friday, October 21, 2016. I would now like to turn the conference over to Jim McVeigh, Public Affairs, Mayo Clinic. Please go ahead sir.

James McVeigh: Thank you. Welcome everyone. Good morning and thank you for joining us today. We're happy to be originating this call today from Arizona State University in Tempe to share some exciting news for both of our organizations.

We'll begin our conference with some brief remarks from our two speakers today, Dr. Wyatt Decker, Vice President, Mayo Clinic and CEO, Mayo Clinic Arizona, and our host for today, Dr. Michael Crow, President of Arizona State University.

Following their remarks our operator will open up the line for your questions. We are scheduled today for a half hour so let's go ahead and kick things off. We'll turn it over to you Dr. Decker for opening remarks.

Wyatt Decker: Well thanks very much Jim and thanks to all of our colleagues on the phone line. It's really a pleasure to be here this morning with President Crow for this announcement.

And I think everybody on the phone recognizes that, you know, our nation faces great challenges in healthcare today. Improving healthcare in the face of this change requires new ways of thinking beyond individual specialties and organizational laws.

And Mayo Clinic as the recognized world leader in patient care, education and research and ASU, the nation's top-ranked university for innovation – we have committed to bringing together the brightest minds for accelerating cutting edge research discoveries, improving patient care through healthcare innovation and transforming medical education, and this is really a step forward of over decade long relationship between Mayo Clinic and Arizona State University.

This relationship has developed joint education programs involving law, business and nursing. We've set up joint funding programs for cutting edge research and developing technology.

We have collaborative research in biomedical informatics, which by the way is - ASU's Department of Biomedical Informatics is embedded at the Mayo Clinic Scottsdale campus.

We have joint programs in bioengineering. We have faculty and staff with joint appointments at both organizations. The ASU Student Health Center is a member of the Mayo Clinic Care Network and we have developed cutting edge curriculum for both nursing students and for medical students.

And as we launch a national Mayo Clinic School of Medicine we are opening a four-year campus, which is accredited and now interviewing students to launch its first class of Mayo Clinic Medical School here in Arizona.

The first class will start in June of 2017. So this is a comprehensive initiative aimed at improving healthcare in both the communities that we serve and nationally.

And when we say improving healthcare we're doing everything from creating a new generation of healthcare providers, doctors and nurses who understand the healthcare system, can measure it and make it better.

We're talking about healthcare innovations by bringing multiple disciplines together from the basic biomedical sciences all the way through to social sciences, business skills and systems engineering and those are the skill sets that ASU brings to help Mayo Clinic solve these problems.

Mayo Clinic's a three-shield organization. You'll see that in our logo. So the center shield is the biggest shield and that's by design and that's a – that to us symbolizes patient care and that's something we take great pride in in caring

for 1.3 million patient from around the country and the world every year across the nation.

The other two shields represent education and research so we believe they – those should be integrated directly into patient care and should always be designed to serve patients either at Mayo or beyond Mayo Clinic and that’s a big part of this initiative.

And the final comment I’ll make before I turn over Dr. Crow is that Mayo Clinic is a large national organization serving 1.3 million patients, and this is a relationship between Arizona State University and Mayo Clinic as a national organization.

It has its roots in a local collaboration here in Arizona, but it has now expanded and extended and will substantially impact Mayo’s operations in Mayo Clinic in Florida and Mayo Clinic in Rochester. Dr. Crow?

Michael Crow: Yes thanks Wyatt. I think what I would add - just quickly a little bit about ASU. Think of us as a latecomer to the scene of national research universities.

And because of our new arrival on that scene and the way the world works today with in a sense a peaking of health outcomes at a very high cost, underachievement in a range of other areas in our society relating to educational outcomes or economic performance - and we decided that the standard design for a university of the past was probably not the best thing to just sit back and replicate.

So we went ahead and built a differentiated university, highly interdisciplinary, highly technology enhanced, highly focused on measuring our success based on our impact in society.

And so given that then a relationship with the Mayo Clinic and this alliance with the Mayo Clinic, the most innovative medical organization in the last 150 years in the United States, the first to think about end-to-end medicine and working through all of the various specialties in medicine and, you know, working in ways that were just unbelievable and then mastering that over 150 years, in our relationship here in Arizona we have found that we think that we can - through a new design, this kind of alliance between this very innovative national scale clinic and this very innovative technology enhanced university that's highly interdisciplinary, we can put onto the table changes in the way that one approaches health issues and health solutions.

We can put on the table methodological approaches to produce completely new types of medical professionals, including physicians through the expansion of the Mayo Medical School to Arizona beginning in the summer of 2017.

On the national scale most of you probably are already aware of the fact that, you know, we have this unbelievably high cost, \$9000 per person per year healthcare system, the results of which are not the leading in the world.

We're somewhere around 25th or so in terms of the results from our healthcare system so we need to rethink that. On the regional level, that is within local communities, we're seeing a - whole new manifestations of preventable diseases and chronic diseases that are the results of human behavior, meaning that we need to think through everything from nutrition education to how we train teachers to how we think about medicine to how we deal with big data analytics, how we help people to make better choices.

All of that is a new kind of approach that we're bringing here and then at the individual level we need every tool that science, and not just biomedical science and physical science but social science and behavioral science and learning science, can bring to the table.

So what we've done is we've taken this new transdisciplinary, technologically enhanced university that we have built here in Arizona and built a coupling mechanism with the Mayo Clinic that allows us to work freely and dynamically between the two institutions without the classic fighting and bickering and arguing among and between disciplines and the rigid structures, which have often contributed to some of the less than successful outcomes.

You know, for instance you may develop new technologies to be able to take on certain diseases, but if you don't simultaneously work with the populations that incur those diseases in certain ways you're not going to get the kinds of outcomes that you want.

And so we're very excited about the alliance, the opportunity to be engaged with an institution of the success, reputation, impact, cost effectiveness and innovative capacity that the Mayo Clinic represents.

And so what we've said is, you know, we are your partner across all 400 of our disciplines that we have at the university and I think that's the unique thing that at least from my perspective we're bringing to this alliance.

And we're excited about the new research projects, the new medical school, the new biomedical informatics school, the new school for the science of healthcare delivery that we have launched running parallel to the medical school, new ways that we're teaching and training and linking and new

methodologies for teaching, new pedagogies, new ways to produce new kinds of physicians, new kinds of nurses.

And so basically the sum of all this is that if you'd like everything just to remain the same with all of the problems and the chaos and the costs and all the issues that we have in healthcare, then we should just keep running the same institutions the way that we run them and basically hope for a better outcome.

Well that isn't the way things work. The only thing that – the only way they work is through thoughtful, designed changes of new ways to produce ideas in people and that's what we're doing with the alliance.

James McVeigh: Thank you Dr. Crow and thank you Dr. Decker. (Emma) can we open up the phone lines now for Q&A?

Operator: Thank you. Ladies and gentlemen if you would like to register a question please press the 1 followed by the 4 on your telephone. You will hear a three tone prompt to acknowledge your request.

If your question has been answered and you would like to withdraw your registration, please press the 1 followed by the 3. If you are using a speakerphone please lift your handset before entering your request.

Once again to register a question please press the 1 followed by the 4 on your telephone keypad. One moment please for our first phone question. And our first question comes from the line of Angela Gonzales with Phoenix Journal. Please proceed.

Angela Gonzales: Good morning and thank you for taking my call. Just a couple of questions about just the basics of that. Do you know the total development costs of that project?

Wyatt Decker: Hi Angela this is Wyatt Decker. Good to hear your voice. So this is a very comprehensive relationship as you know and extends over a decade of collaborations, shared research, education and practice innovation between our organizations.

So we don't have a specific cost because each of these - typically we - both ASU and Mayo Clinic - we bring resources together to tackle various problems or challenges in healthcare.

So there's not a specific budget for this collaboration but there is a shared governing body that - for the Mayo Clinic and ASU Alliance for Healthcare. And so we have a senior governance committee that will - from now forward will help strategize and we do have some shared projects that we put together money in a pot for research seed funding as an example.

And so there's so many different elements like that that we don't have a single number for for the budget. Does that make sense?

Angela Gonzales: Oh. Yes that makes sense.

Michael Crow: What I would add...

Angela Gonzales: So what about...?

Michael Crow: Angela this is Michael. What I would add is that these two institutions together have about 80 – more than 80,000 employees. They have a \$14 billion annual revenue between the two of them together.

Within that structure, within all of that what we're – what – I think the way to sort of look at this is that this is going to become larger than the dozens and dozens and dozens of projects that we already have in place.

We will now move into the realm of hundreds of projects/hundreds of initiatives. One project will be the building of a major new facility at the Mayo Clinic Phoenix site in North Phoenix where ASU will be constructing a facility related to health solutions innovation.

So think of that as one part of one project in an alliance involving hundreds of projects going on on a national scale, do – and working on everything from people production, so the new medical school.

Mayo is investing lots of resources into that, raising lots of resources. People in Arizona are contributing to that – totally privately financed medical school for the expansion of the Mayo Clinic, with us now advancing the School for the Science of Healthcare Delivery.

If you add it all up it's probably a huge number but that's actually not how we think so it's not a – it's basically – it's – the focus here in my view is on the alliance itself connecting to massive high-speed, highly innovative, creative organizations to produce new solutions.

Out of that lots of new healthcare solutions will be derived. Lots of new expansion of Mayo Clinic will occur. Expansion of ASU will occur, all

derivative of all these things all measured against whether or not we've helped healthcare outcomes or not.

Angela Gonzales: Okay that's great.

Wyatt Decker: And if I could – yes just building on this quickly too is on the Mayo Clinic in Arizona perspective, you know, we anticipate – we currently have about a \$2 billion impact on the state economy, and we anticipate adding over 1000 high tech jobs in the next five to ten years and we would like to see that accelerated.

We don't even think that's going to meet the needs of our state, and I'm just talking about here in Arizona much less Mayo Clinic nationally. In order to accelerate that we know that we need partnerships, and we feel that ASU is a very unique and special partner in initiatives we've already established as we've touched on and that the cultures of our two organizations, culture of Mayo Clinic focused relentlessly on serving the needs of patients, particularly patients with complex medical problems that need team-based care, combined with ASU's focus on really pulling out all the stops to innovate and bring different disciplines together is going to be – it's a catalyst to accelerate change and find solutions for healthcare and also create businesses and actually grow the – in this case the Arizona economy in the healthcare and bio sectors.

Angela Gonzales: Okay good. Will this – that KUD was interested in project right there – will this accelerate their interests or what happened with that whole bio corridor with KUD?

Wyatt Decker: Yes so there's still great interest and we are working directly with ASU, the City of Phoenix, the governor's office, the Arizona Commerce Authority and we really view it as a stepwise function.

So Mayo Clinic is focused on investing as you know in high tech destination medical care on the Phoenix campus. It includes proton beam/a new cancer center.

We're opening a tissue engineering lab and et cetera. ASU as you just heard from Dr. Crow is preparing step – sort of Step B or Step 2 of this incredible development for the state, which is going to be to put an education, research and innovation center adjacent to our Phoenix operations.

And then we think that as we get that underway that Step 3 would be working with this consortium to create a world-class destination for healthcare services for bio businesses and others in kind of a health solutions district.

So we're still – that's still work in progress. The exact partners for development is yet to be determined.

Angela Gonzales: Oh. Okay great. Thank you. Thank you very much.

Michael Crow: Yes Angela what I would add to that is that you can assume that with the ASU acquisition of 25 or so acres next to the Mayo Clinic Phoenix site, with our physical presence with Mayo on the Scottsdale site, with Mayo becoming deeper and deeper involved in what we're doing on our Tempe campus that, you know, what you're going to have is multiple sites for different levels of evolution of the local health solutions related economy.

So it's not just healthcare. It's not just hospitals and medical care but it's biomedical informatics, big data analytics, clinical decision making, precision medicine computational facilities, software programmers, analysts, nurse practitioners working with computer scientists, working with high performance medicine specialists, working with trainers and all kinds of people working on lifelong learning related to nutrition.

The – so you have to think about this as broader or bigger than just what might go on along the corridor by the Mayo Clinic hospital. At the same time that's a wonderful site to – that – we have a very close relationship with the City of Phoenix.

We're working closely with Mayor Stanton and his crew and he's committed to moving forward on these things. We're not quite to that project yet but that would be one of many things that will be the outcome of this alliance.

Angela Gonzales: Yes. Okay. If I may just – do you have a dollar figure on the 150,000 square-foot solutions innovation center, and have you picked an architect and general contractor for that?

Michael Crow: We're still – this is Michael. We're still operating on a conceptual level. We have some conceptual renderings of the site. It's more than \$100 million and less than \$200 million.

It all depends so it's not so much what a building looks like anymore. It's what's in it and so what we're hoping to do in that facility is to create an absolutely never before created most innovative teaching facility, learning facility and innovation facility related to new health solutions and the production of new doctors/new health professionals and so the building will be in a sense a trivial part of it.

The most important part will be the design of the actual interfaces with the humans that will be in that building.

Angela Gonzales: Okay great. Thank you so much. I didn't mean to take up so much time. Thank you very much for your answers.

Operator: Our next question comes from the line of Stephanie Innes with the Arizona Daily Star. Please proceed.

Stephanie Innes: (Unintelligible).

Operator: Miss Innes your line is now open. Please proceed with your question.

Stephanie Innes: (Unintelligible).

Operator: Miss Innes we're having difficulties hearing you. I'll proceed. Our next question comes from the line of Ilene MacDonald with FierceHealthcare. Please proceed. Miss MacDonald your line is now open. Please proceed with your question.

Ilene MacDonald: Hi. Can you hear me now?

Michael Crow: Yes.

Operator: Yes we can.

Ilene MacDonald: Hello? Can you hear me?

Operator: Ma'am please proceed.

Ilene MacDonald: Hi. Thank you for taking my call. I was curious if you could tell me what the – I know you've mentioned that you're doing the interviews for the medical students now.

What are you projecting for the enrollment numbers and if you could tell me a little bit about what might the curriculum look like?

Wyatt Decker: Absolutely. Thanks for joining us – a great question. So Mayo Medical School has existed in Rochester, Minnesota since 1972 and has always been known for its innovation and patient-oriented approach to training doctors.

But as that progressed we developed a vision in Mayo Clinic in collaboration with ASU on how to enhance medical school education. And one of the biggest advances that has been badly needed in the way our nation's doctors are trained is really in giving them the skill sets to measure and improve the healthcare system that they are a part of.

And so that is a major focus of Mayo Medical School or Mayo Clinic School of Medicine both here in Arizona and in Rochester. So it's a national medical school and we're opening our second four-year campus here in Arizona.

But this is a – really a radical departure from traditional medical education because in addition to making sure our medical students will be well trained in diagnosis and treatment of diseases they'll – they will get a special curriculum that we've developed with ASU in the – in what we call the – is – and under this alliance we call the science of healthcare delivery.

And imagine if our nation's doctors and nurses and others over time had the skill sets taught by systems engineers, by businesspeople, by social scientists

and others how to understand a system that they're practicing in whether it's an emergency department, a clinic or an entire hospital system and how to improve outcomes at an – and keeping costs affordable.

And that is – and now embedded in this curriculum so it's a very exciting initiative. We're in a consortium of medical schools that are trading best practices because our hope is not only to dramatically improve medical education for Mayo Clinic, but also to dramatically improve medical education for the nation.

And by working with colleagues from ASU we are quite confident that this is going to be one of the nation's most innovative medical schools, A; B, getting back to your question on size our first class here in Arizona will mirror the size of the class in Rochester, Minnesota and it will have 50 students matriculating.

And just to give you an idea for the demand so far this year -- we're only halfway into the application and interview season -- we've received 2500 roughly applications so 2500 applications for 50 positions.

So we're seeing tremendous demand, fantastic quality of a very diverse group of applicants who we think with these skill sets will go forth to be our nation's future leaders of healthcare.

Ilene MacDonald: Thank you so much.

Wyatt Decker: Thank you.

Operator: Ladies and gentlemen as a reminder to register a question, please press the 1 followed by the 4 on your telephone keypad. Our next question is a question from the line of Stephanie Innes with the Arizona Daily Star. Please proceed.

Stephanie Innes: Can you hear me now?

Wyatt Decker: Yes we can hear you.

Operator: Yes we can hear you. Miss Innes please proceed.

Stephanie Innes: Can you hear me? Hello?

Wyatt Decker: Yes we can hear you Stephanie.

Stephanie Innes: You can hear me. Okay great. Finally. So I just had a question – and how are you – how is this alliance the same or different from what Banner Health has done with the University of Arizona?

Wyatt Decker: Well I'm going to make a couple of comments and Michael you may want to comment as well. So this is Wyatt Decker. So Stephanie this is an alliance that has been really the culmination of over a decade of collaboration.

So, A, it's nothing new. It's – what – there are some elements to it, which is the formalization of this really transformative relationship between Mayo Clinic and Arizona State University.

The other piece is that we are deepening and strengthening our already very robust collaboration, but it doesn't involve an acquisition and so neither organization is acquiring the other and - nor are we merging.

We – what we’re really doing is bringing an incredibly powerful skill set of ASU as the nation’s most innovative university and really a comprehensive university with all of the academic disciplines that you’re aware of in humanities, social sciences, business, engineering as well as biomedical sciences combining that with the nation’s best medical center and so – and one of the largest multidisciplinary medical centers in the United States.

So, you know, when you just – when you think about the power of, you know, its – it - pouring these two incredibly potent mixtures together and imagining the bubbling and steam that is going to come up, we’re incredibly excited that by formalizing this relationship we’re going to continue to increase the depth and the breadth of how we work together to solve our nation’s healthcare problems. Michael any other comments on that one?

Michael Crow: I think what I would add Stephanie to your question – this is Michael. I would add that, you know, first I think that it’s really important for the state of Arizona to grow and evolve numerous biomedical education, teaching, learning and discovery organizations.

This is a big state already. It’s growing to be a bigger state. You want these various entities to be different than each other, taking different angles and, you know, we’re taking this highly transdisciplinary, highly technology driven approach in our relationship with the Mayo Clinic.

And so it’s different in the sense that this is an intellectual joint venture as opposed to a financial joint venture and...

Stephanie Innes: Okay.

Michael Crow: ...I think at the end of the day where we end up is lots of good things happening in Arizona and lots of exciting new opportunities for technology development, economic development, healthcare improvement, health outcomes improvements and so I think it's different and thus complementary.

Wyatt Decker: And, you know, one other – this is Wyatt again. One other piece is that Mayo Clinic is relentlessly focused on serving our patients and we also – and through those advances that we share improving patient care beyond the walls of the Mayo Clinic is on a – incredibly important to us.

And so this collaboration, the Alliance for Healthcare, is going to improve the care of patients at the Mayo Clinic and it's going to improve the care for patients around the state and the country.

And over time we're going to be sharing tangible examples of that and this – and we've already shown everything from projects where we bring individuals from the humanities into the patient bedside, from ASU humanities students who work with our patients at Mayo Clinic on writing poetry while their patients – or on – or songs at – so humanities all the way through very high tech biomedicine collaboratives in genomics, in tissue engineering and in other domains and so everything we do is focused on improving patient care.

Stephanie Innes: And one other thing on that. You said that you've formalized your alliance so does that mean you signed something or you're just...?

Wyatt Decker: Sorry I couldn't hear that.

Stephanie Innes: Oh. So what does it mean when you say that you've formalized your collaboration or your alliance?

Wyatt Decker: Well we – recently Dr. Crow and a group of senior leaders from Arizona State University were at our headquarters in Rochester, Minnesota where we ratified a formal agreement between our organizations and that’s really what...

Stephanie Innes: Okay.

Wyatt Decker: ...we’re here announcing that this is the Mayo Clinic and ASU Alliance for Healthcare. So absolutely...

Stephanie Innes: Okay.

Wyatt Decker: ...we have a shared governance board. We have a system now to prioritize projects. We still encourage lots of grassroots projects. It’s almost like an umbrella where faculty at ASU and physicians, nurses and scientists at Mayo Clinic have a green light to pick up the phone or tap out an email and talk to each other and figure out what they want to do together.

And that happens every day Stephanie, which is really exciting but there’s also now a way to say, “What are our – what do – what does Michael Crow and the ASU team and our Mayo Clinic team – what areas would we as senior leaders like to really accelerate and apply resources to?” And so this allows a structure for certain initiatives to get fast-tracked.

Michael Crow: What I would – this is Michael. What I would add Stephanie is that, you know, we’ve been building over – we have \$90 million in joint research projects that we’ve built up over time.

We have – we are the nursing education partner with the Mayo Clinic here in Arizona. We have the School for the Science of Healthcare Delivery, the

School for Biomedical Informatics, which are – have lots of joint appointments between Mayo and ASU at the faculty level.

And between both of those schools we're looking to ultimately move part of our biomedical – our School of Bio and Health Systems Engineering - the biomedical engineering component will ultimately have elements at the Mayo Clinic Phoenix site.

And so all of these things are representative of putting projects on the ground that help us to actually know what we wanted this alliance to be so we have a lot of history.

And the alliance is the formalization and the culmination of this arrangement of this comprehensive connection between ASU and Mayo.

Stephanie Innes: Thank you for answering my questions.

James McVeigh: (Emma) we're at the top of the hour. We would have time for one more question.

Operator: Ladies and gentlemen as a reminder to register a question, please press the 14 on your telephone keypad. Our next question is a follow-up question from Angela Gonzales with the Phoenix Journal. Please proceed.

Angela Gonzales: Thank you for taking this last call. Just a clarification – are you saying that KUD is no longer involved in the overall development of that bio corridor; that you're looking for new partners?

Wyatt Decker: We do not have an exclusive arrangement with KUD so we haven't excluded them but we don't – we do not have an exclusive arrangement with them and so that will be determined over time.

Angela Gonzales: Okay. Okay thank you. Thank you very much.

Wyatt Decker: Thanks Angela.

Operator: Gentlemen there appears to be no further questions on the phone lines. I'll turn the presentation back to you for any closing remarks.

James McVeigh: Dr. Decker, Dr. Crow would you like to – any closing remarks?

Wyatt Decker: I'd just like to add that it – working with ASU has been a real pleasure for both myself and my colleagues at Mayo Clinic. Why is that? Well that's because our two organizations have this unique cultural alignment of being relentlessly driven to find solutions for meaningful societal problems.

With Mayo Clinic being a healthcare organization we are focused on health and healthcare, and ASU has worked in – on a whole large domain of meaningful problems for society but has - under the leadership of Dr. Crow has determined that health and healthcare is one of those areas where they can meaningfully contribute.

And by bringing the multiple disciplines that have – exist at ASU but have been greatly strengthened under the leadership of Dr. Crow and combining them with the Mayo Clinic we are very, very excited about the future of this alliance and I'd just thank all of you for joining us today. Michael?

Michael Crow: What I would add is that, you know, we live in a tremendous country and we live in a tremendous – with tremendous achievements. At the same time we seem to be experiencing some need – we seem to be experiencing some outcomes that lead one to conclude that you need new institutions and new people to come to the front line.

We have declining life spans for people with a high school education or less in the United States. That's a very negative outcome. We have different groups of our society that are – have – experiencing tremendous health challenges and life challenges.

And how do we approach those problems except in our case at ASU by saying, "Well we've got all this talent and all this energy. Where is there a fantastic, nationally scaled clinic which is relentlessly innovative as Wyatt just suggested where we can actually come up with whole new ways to produce people, whole new ways to produce ideas, whole new ways to produce health solutions?"

And so that's what's driving us. What's driving us is trying to find a way where we can provide the means and the basis for life enhancement for everyone, and that's what this is all about for us.

James McVeigh: Thank you Dr. Crow and thank you Dr. Decker. That concludes our conference this morning. If you would like any more information or have follow-up questions, you feel free to reach out to me, Jim McVeigh, at Mayo Clinic or Steven Beschloss at ASU.

Our contact information is on the advisory that you all received. You can also check out mayo.asu.edu/pressroom. That's mayo.edu – sorry,

mayo.asu.edu/pressroom or the Mayo Clinic News Network at newsnetwork.mayoclinic.org. Thank you.

Wyatt Decker: Thank you.

Operator: Ladies and gentlemen that concludes today's conference call. We thank you all for your participation. You may now disconnect your lines.

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