

Human Centered Design for Healthcare Improvement in Innovation

Learning and Action Networking Event

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Hello and welcome to today's presentation: Human Centered Design for Healthcare Improvement in Innovation.

Today's presentation is brought to you by Atom Alliance. The atom Alliance is a five-state alliance composed of three nonprofit healthcare quality improvement consulting companies. We hold contracts with the Centers for Medicare & Medicaid Services, in which we partner with healthcare providers, stakeholders and beneficiaries to accomplish objectives geared towards meeting the National Quality Strategy aims; better more affordable care and healthier communities. As part of these efforts, we help eligible clinicians and groups better understand and successfully participate in the Quality Payment Program by offering free technical assistance, tools, resources and educational events. We welcome participants from our atom Alliance states; Alabama, Indiana, Kentucky, Mississippi and Tennessee, as well as anyone else that was able to join us.

At this time, I will turn the stage to Jess Roberts our speaker today. Jess the floor is yours.

Thanks Karen, so today we're going to dive into part one of Human Centered Design or design thinking outline what it is, most relevant principles and tools for healthcare, health promotion and describe what design thinking is and maybe more importantly for folks, what it is not, as well as how it relates to other improvement or innovation practices.

What is design thinking or humans centered design? And I'll use these terms interchangeably because they are used interchangeably in most research. Defined in its broadest terms, it's a systematic innovation process that prioritizes deep end thinking for and users' desires needs and challenges in the hopes that they understand a problem more comprehensively. Understanding from a different perspective that lends itself well to potentially new or unique solutions.

So, design thinking in healthcare has grown pretty quickly over the last five to ten years. In the beginning to take root and show up in industry peer review literature as well as popular culture articles that show up in New York Times, Harvard Business Review, Stamper Social Innovation review, Forbes, etc. Additionally, organizations such as the Robert Wood Johnson Foundation, the Institute for Healthcare Improvement, the Centers for Disease Control and Prevention and CMS, which most of you are familiar with, are recommending and/or funding efforts guided by design thinking.

In a recent, I think September of last year, of a systematic review of design thinking in health care of the CDC's journal, Preventing Chronic Disease, noted 24 studies using design thinking and found that twelve were successful, eleven reported mixed results, and one was not successful. And in the four studies comparing design to traditional, more traditional interventions, they all showed greater satisfaction usability and effectiveness in the intervention developed through the design process.

Additionally, there was a recent survey in the New England Journal of Medicine Catalyst, and it was a survey of their council members who are clinician leaders, clinicians and executives directly involved in health care delivery. I mean it was completed to gauge the understanding and the desire for practice of design thinking.

Of those surveyed ninety-five percent of respondents believe that design thinking can be extremely useful, very useful or useful in the health care industry. And when asked about its usefulness in their own organization's ninety-one percent cited it extremely useful, very useful or useful.

What are those issues most in need as identified by the New England Journal survey? Those surveyed identified care coordination, integration and funding of the social determinants and technology use, integration and improvement as the top three issues within healthcare that would benefit most from design thinking.

So, while respondents overwhelmingly found value in design thinking to improve and/or transform care a full two-thirds of the respondents noted that their organization's employ design thinking only occasionally, seldom or never.

So, what's the problem? As the survey results showed, design thinking's application has been impeded primarily by limited organizational buy-in and limited understanding to the concept related to limited understanding is insufficient trainings in design and this confusion in disinterest to invest in design thinking is often for good reason. Too often design is offered up as a one-size-fits-all bootcamp. Many of you that have likely participated in some form of this if you are familiar with design thinking. And it's not only ineffective, it tends to frustrate organizations more than it benefits them. There's a big difference, and understanding design at the conceptual level, which is the intent of those boot camps or workshops and having a practice or applied understanding of it. If design holds the promise many have been touting, many of the articles that I've cited in the beginning of the presentation is very unlikely you can learn it in a 2-day workshop full of post-its. Most experiences I've seen in the certain design workshop is it is sort of a focus on producing ideas and post-its and many people tend to feel a little bit like this image at the end of the day. Design done well however offers structure and language to the adaptive work. Many frontline staff and leaders alike are already doing or struggling with. And so, design done well is actually a compliment to many of the other practices and challenges the organization is already dealing with rather than an entirely new initiative or set of tools.

So, the biggest takeaway from this presentation a set of tools or specific approaches rather an understanding of the principles behind design, what it looks like will really be unique and adapted to each individual and/or their organization. It needs to really be context specific to the work being done by the organization and its employees to get a better sense of what those principles of design thinking.

I have a short exercise which is a little bit tricky to do virtually, but if you wanted to pause your video for two minutes and write down as many uses as you can think for a paper clip. So just make a list. In two minutes come up with as many ideas or uses you can think of that you would use a paper clip for.

So how did you do? You could look at where the number of ideas and where you fall on this spectrum to the common creativity test, it's called an alternative uses test. On average about two percent of adults will score exceptional on this test, so not many. Conversely though 98% of kindergartners will score exceptional on this test and that's primarily because kindergartners ask fundamentally different questions about a paper clip. They will ask things like; you know, what if the paper clip was ten feet tall or what if it was made of rubber? So, in short, as adults we become experts in things like paper clips. We no longer wonder or question its functionality. While this is helpful for survival, because we'd be exhausted by, you know, 10 a.m. if we had to rethink every experience or product, we came across every day. It's a disabling habit when it comes to fostering creativity. And we'd argue that the greatest threat to solving those big 21st century problems in healthcare is not a lack of resources or interest, but a chronic lack of creativity. This sort of expertise model of having answers has really inhibited our ability to approach problems with those fresh eyes like a kindergartner looking at a paper clip. So above all, design is about bringing a structured opportunity for creativity, not just to better solve problems, but more importantly reframe our most persistent problems, to ask fundamentally different questions to all the paper clips we deal with every day in healthcare.

What is the real value of the design approach, what does it bring to the work that many of you are already doing? One, it's a structure for the unknown. So, it's a rigorous and iterative process to learn your way forward into the unknown. Which really if you think about it is the only safe way to navigate those unknown spaces. If we're creating big plans to execute over many years, either we're working in the known space or we're making really dangerous assumptions that we're going to have to learn the hard way after those few years of in building an intervention.

Secondly, it's about facilitating a shared language. It develops a shared language understanding in action by grounding individuals and design teams and the lived experience of those most impacted by the challenge, your end user if you will. It places those most familiar with the problem and with the most at stake and addressing it in the driver's seat of change. So, not just lending input or feedback, but creating shared ownership in the process itself, so that it isn't about collecting a little bit of information from a focus group and then removing those people most impacted by a problem from the problem-solving process.

And then finally it's about making the abstract tangible, creating prototypes in whatever form that might be so that people can respond to it and give you feedback. So, we're not keeping ideas in really big abstract PowerPoints or actually acting out, you know we're creating really rough tools for patients and clinicians to actually engage with and that feedback when we can actually use it.

Those big sticky problems we're talking about earlier, those are what we refer to in the design world as wicked problems. So, these are the problems that aren't solved by in the traditional thing. There isn't a right answer, you can't come to the conclusion of a right or wrong. And usually these things are identified a couple ways. One, there the problems we're not exactly sure where they emerge from, what their origins are, we're not exactly sure what the problem is. And then number two, it's the problem that's persisted over time regardless of what we've done to address it in the past. And I know working in healthcare that we have a lot of these. We continue to sort of try same approaches to address the same problem and that's probably a strong indicator that it's not so much what we're doing to solve it, it's that wasn't it's not the right problem in the first place.

So, design is really well-suited for these complex or wicked problems and one of the challenges is we confuse complicated and complex problems. Complicated problems are those problems that are difficult to solve but still have a right answer and can be figured out by the experts, right. This is the domain of the expert. This is where we would default to the adults, because we know what the paperclip is used for and there's a right answer. We can come to that conclusion and solve it. The complex problems on the other hand is where the whole is far more than the sum of its parts and doesn't have that right answer that can be ferreted out. In fact, the variables are oftentimes dynamic and changing so, even if you could solve for it, you know it may be irrelevant in a day or a week or a year. And so, this is the domain of emergence. Again, design is far more about that iterative process to deal with emergent and changing and disrupting problems, those complex problems. The problem with you not understanding the differences between these is that by narrowly framing our problems we confuse complicated with complex. And that's problematic because we just default to our go to complicated problem-solving approaches. You know the process improvement type processes that most people are familiar with and they continue to sort of persist, these problems continue to persist.

So, what are the differences in those approaches? As I mentioned in that complicated space, improvement works really well because it's as it suggests, it's about improving upon a system that is fundamentally the right system to address the problem we're trying to address. We just need to tweak and improve upon its design and that complex problems on the other hand are where the system in place may actually be contributing to the problems itself.

So, it should be seeing that design and improvement should be seen is different but rather complementary to one another. This is a table to help illustrate them, the differences in those approaches from the paper I published a couple years ago. Of most significance is that design starts with a divergent approach. So, it's a more of an exploration of all

possible problems and ideas versus looking to build a consensus and converge on solutions quite quickly. Two, it recognizes that what's important to someone within a particular experience, like a clinic visit, may not be what's important to them at a broader level and they're sort of daily life. So, when I ask someone in the clinic what might improve that clinic experience you know I'll get feedback like updated newspapers, coffee maybe in the waiting room. But if I'm asking them what matters most to them oftentimes, you'll find that the clinic and/or clinician model that you're sort of driving them through may actually be one part of the problem for those folks and you don't get at that if you can't take that step back.

And then finally perhaps most importantly is recognizing that how people feel is a very different orientation than getting at how people think and how someone feels is a much stronger indicator of how those people will behave or make decisions in the future.

Rather than a set of predetermined tools, I think that design is better described as a set of principles. Many folks have sort of the tools and approaches that already are practicing those things in the field that can sort of fit within these areas. So, the first one is empathetic engagement, and this is really about truly understanding those lived experiences of the folks, your end user, the folks, your stakeholders, the folks, you say yours you're looking to solve challenges for. And there's a big difference from empathetic thinking, which I think many of us, maybe think is empathy, and empathetic engagement or doing empathetic thinking. Actually, there's data that suggests when you think empathetic or you actually the paradox is you make yourself less empathetic because you'll simply apply your own values or world views on an abstract population, versus empathetic engagement which means actively engaging with getting outside of your day-to-day, your institution, to engage with those most impacted by a particular challenge. Where their lived experience, they're viewing the problem through their eyes, hearts and stomachs, looks really different than the abstracted problem we're at oftentimes responding to.

Second piece of this is that is radical collaboration, so we collaborate but it's probably too frequent already. It's the same people taking the same approaches to address the same problems and expecting different results. It's because we have the same people. We've all been trained similarly, come from similar backgrounds and while that's a great recipe for consensus, it tends to continue to predicate a lot of the structural challenges that existed in the first place. When so radical collaboration is really where you bring in those new perspectives, folks that have had very different trainings, expertise, even knowledge about the problem to start with, because that is creativity. Creativity isn't a new idea; creativity is simply combining existing ideas and the experiences and new ways. And the most effective way in which you can facilitate or foster that is by bringing in differing perspectives and experiences. That is where creativity is born.

And then finally this concept of rapid prototyping so, this is the doing, to think or just getting ideas out there for feedback in real time and getting it with the objective of good enough, rather than creating something really highly planned and produced. And I know

we can do this in healthcare, a lot where we get caught up in wordsmithing, etc. instead of getting feedback on the bigger ideas.

And there's a big difference between rapid prototyping and piloting. Which I think many of us are probably familiar with. Prototyping is really about testing something really quickly. It could be in the scale of testing a tool or a new clinic experience with one or two patients. Piloting is often this really big at sort of top-down hypotheses in which to test over a long period of time and then sort of share those learnings. The outcome of piloting is, was our hypothesis right or wrong.

They all come to prototyping, is what did we learn that we didn't know before and can inform that next iteration. Which is why you can be comfortable engaging just two patients because it's about information and learning rather than developing a statistically significant sample set. So, in that way this is all the about sort of the upstream work to more formal piloting or research practices that many of us are familiar with.

If you Google Design Thinking, or Human Centered Design there's an awful lot out there. There's a lot of tools, a lot of different stuff by step processes. But again, the key to take away is to sort of at the high level understand that it is about this divergence exploration and then synthesis and focus of good enough to move forward. And also recognize it's not this linear, sequential process, instead it's about what you're learning as you're synthesizing your research or even testing ideas, may actually inform how you need to reframe your thinking in your research process. This is not an A to B, but you can move back and forth through this process many times but the idea is you are moving through it quite rapidly so it's not something that is not necessarily going to take a year or six months but you can move through this quite quickly. Core to this is that people most impacted, your key stakeholders, are part of this process beginning, middle and end and they play that active role. There's that shared decision-making, through this process, beyond Patient Advisory Councils. But what is that codesign role for you know patients and/or community co-designers, they need to be part of this process not just lending it feedback. The focus of doing to think, so just getting ideas, assumptions, examples out there so that people can respond to them and you can then incorporate that feedback when it's actually still valuable rather than at the end of the process.

So, in design thinking the problem is the problem. There's no more important part of the problem-solving process than the problem framing process. So, this is one of the great fallacies of innovation is that it's all great ideas that just sort of leap fully formed from the minds of genius you know thinking, Steve Jobs. But in reality, most of the breakthroughs have occurred because people start to think differently about the problems out the solution. And in fact, I argued the biggest source of waste today in health care is in inefficiencies or duplicative processes. Instead it's that huge investment made in elegantly solving for the wrong problems over and over and over again.

What do I mean by that? To give you an illustration, a decade or so ago Procter & Gamble began investigating new and more effective cleaning agents for mopping. So, they put several of their top chemists on the project and they spent two years working to

develop something. The problem was, they could create a cleaning agent that would clean the floors more effectively, but then they started to become too caustic for people to use and/or the material that it was being applied to it. So, this back and forth balance of trying to find that new better mopping solution. So, after two years they hired a consultant and the first thing they did was actually just leave the lab and go watch people cleaning their floors, mopping their floors. What they found pretty quickly was that A, mopping is a really dirty process. People would change out of their clothes into they're mopping clothes, which was oftentimes their old sweatshirts from college, things that could get stained and dirty. So, the other thing they recognized that people had to preclean the floor, sweep the floor before they mopped. After several observations, a problem emerged in which people were pre cleaning their floors, pre mopping them before the observers the researchers showed up. So, the researchers would spill things to see what people would do to clean it up. They did what many of us would do, they grabbed a piece of paper towel and wipe it up.

And thus, the birth of the Swiffer, essentially a paper towel on a stick and a product that grosses hundreds of millions of dollars a year. And so, by getting out of the lab with the experts, remember the paper clip, and into the lives of real people, the company was able to reframe the problem and completely reframe what it meant to clean your floor, not mop your floor, but actually clean your floor.

Now unfortunately as humans, we're not good at that reframing process, we're not born with it, we're biologically wired for solutions and thinking about the future, very much like we've thought about the past. It's hardwired as shown in these brain scans from research done in 2007. So, the very regions of our brain that fire when we reflect on the past are the same regions of the brain that fire when we think about the future. And this is why it's unhelpful to ask people what their problems are or what their ideal state might be because we just don't know what we don't know. Look at how disruptions and technology have completely transformed various industries like photography or movies or retail and it's because we didn't see those things coming. We don't know what we don't know, we don't know what's possible based on a current state of thinking. And this premise is really at the core of a famous quote from Henry Ford, who I think has been discredited that he actually didn't say this, but it was, "if I had asked people what they wanted, it would have been a faster horse".

So, because of this we need a way to trick our brains and our natural human and organizational tendencies we need a structure for a design thinking all finding design thinking tools or trainings is pretty easy, there's a lot out there. What is almost always missing is the structure for practicing it and that's the design studio structure. It's a semi structured, iterative exploration synthesis and ideation infrastructure and it's really the format for learning and practicing design. It's what my education and my practice being trained as an architect, this is what I participated in all the time and it's about a couple things. One is about learning again that iterative learning your way forward, can't plan for the unexpected. So, you need to allow space for those things to emerge, it helps us avoid brainstorming and groupthink. So that one of the things that we do oftentimes in healthcare is we get together, we workshop, we brainstorm. Even though the research is

very clear that brainstorming will actually create fewer ideas and make us less productive. This allows us to go out and explore pinup. So, in design we would pin up our work, our assumptions, our questions as we went so that we would get feedback. And this is literally where “back to the drawing board” came from. The design studio structure where we would get that feedback that input the things, we weren't seeing so that we could incorporate that in real time when it actually was meaningful versus sharing a final product that couldn't change anymore. And so, this is also about addressing the issues of inattentional blindness. So, this is when we don't see things because we become so focused or honed or expert in a particular issue. This is the many of you may have seen the video of the folks passing the basketball around and you were supposed to count how many passes were made and the person in an ape suit walks through and you miss it because you're focused on something specific. So, this helps to break from both the brainstorming and that inattentional blindness. It's a structure for that and practicing that empathetic engagement, radical collaboration and rapid prototyping and above all it's about creating the biggest barrier to reframing and thinking differently, creativity, which is just simply the space for it.

Counter to more traditional models, where you design a solution a plan you then execute that over a period of time and then you share the results. The diagram at the bottom shows, may look chaos, like chaos and a bit messy but that iterative process of your exploring in small teams or individuals then you're coming back together sharing what you're learning your questions, your possible ideas and getting feedback, going back out into the field constantly, being informed by key stakeholders in particular your end users those dealing with the challenges. Without embedding this structure to think or practice like a designer no amount of trainings or tools will ever deliver on the promise of design thinking. And it's unfortunately where I see the vast majority of organizations attempting to implement design thinking. And many of you may have had experience with this already. It really is about enabling the collective creativity and knowledge across health organizations and ultimately allowing the individuals to rediscover the reason most of them got into the health field in the first place, to serve other humans, to center their work on the humans, the human centered design piece of design thinking.

In part two of this of this presentation I'll take many of these concepts and show you real-world examples of where design done well can result in some pretty interesting and unique and effective solutions in the healthcare and health promotion space.

Thank You Jess, this is great information. We do have a few questions if we can begin with a Q & A session. So, the first question today is: Why do we need another new approach or flavor of the day?

I get this a lot and working in health care I've seen my share of eye rolls. But I think again, that's the process I was talking about before. When it is about this, you know, we will go through this two-day bootcamp and come out the other end. These design experts that will somehow be able to sprinkle magic pixie dust on whatever issue is impacting the organization right. That's just not the way that this works. I have found that it shouldn't be a new approach it should be very much complementary to the other things that people

again, on the ground oftentimes, and leaders are already doing. But lend us structure to and a rigor to the way those things are being done. And also recognize the types of problems you're trying to address. It may be beneficial to have that human centered lens on everything you do but the process itself really is more about that exploration of those bigger persistent complex problems. Then when we need to refine a tool or language on an intake form or something like that, that we have lots of processes that can do that. So, I try not to get hung up on the language or this is design, its design, or lean, or agile or or and instead recognize there's principles of design that can be brought to all the work and all the training and all the expertise that are already part of these organizations. And in part two you'll see that by bringing design in within the organization, rather than this extra innovation group or center, is when you'll see the greatest impact in the work that you're doing.

Thanks Jess and that brings me to the next question. How is this different than the Lean Agile Community Engagement, other things we're using?

I tend to see design as on this continuum of innovation and improvement. But it's in this space that I think we've neglected a bit, which is the upstream where we're asking fundamentally different questions. Because the reality is some of the systems we built were built under very different expectations and we are now looking to get out of the set of the practice or system of health care. No matter how much we tweak that system we will still be missing what people are asking for or even how we define help. We look at younger folks now. They look at help very differently than generations before them and even on the on the trajectory of life people define help so differently based on where they are life events, etcetera. It's more about continuing the drumbeat of that outside in approach but at every point we should be starting with our customer, our stakeholder, our end user. And that's not just our patients, right, it's our clinicians, it's the folks that are part of that interaction that we're designing around. There're principles of lean and agile and certainly community engagement that are all part of this. It's just again, what is that infrastructure for doing this well? If you don't have the space, then it doesn't really matter what you do, or what tools you have, or what you call it. You're constantly trying to just attach it to a system that was never designed to deliver the results you're looking for. Related to, complimentary of, but not and so not in competition with, it is the when you have those more fundamental questions that's the space of design.

Great thank you! And, how do you know when you've identified the right users or the right problem?

I talked a lot about engaging those consumers those stakeholders, as well as the problem framing. And I've gotten this question quite often. I think my response to this is that we can't know that, and that's the point. We need a process to help us understand that as we go to emerge, who is the right pop, the population we're engaging. What is the right problem, so it is about that iterative process more than anything versus we need to be right up front? Because almost universally and many people who have piloted things right? You realize pretty quickly you get these feedback loops that are telling you maybe this wasn't where these assumptions were wrong. But too often in the piloting work we've

already identified a particular intervention and we can't really change it. Design is about recognizing, well, those feedback words are really valuable and they're telling us something about the problem and/or the solution to those problems. And we need a structure for really rapidly incorporating those things. So more than anything, it's a structure to recognize we can't know that it's the right user, or problem, in that up front in the boardroom. It needs to happen over time in collaboration with those most impacted.

Great thank you! And I guess this leads to, won't this cost more money and take more time all of those things. as you know in healthcare, we don't have enough of?

Time usually not, and it's usually where you want to invest your time and resources, quite frankly. So, an example, I have is with a health system that was looking to address burnout and they took that pretty standard approach of gathering the experts in a room for a period of time to develop what's the intervention. And so, they created this, mostly in isolation, top-down intervention. Which is number one right, a problem. For when we're talking about burnout, because much of burnout is a lack of autonomy and getting top down initiatives rolled out on you know sort of applied to the clinicians. Already you are doing to your user what they have told you was part of the problem. Then the other thing was, you know not only are we sort of rolling this out and you have little input in that pilot phase, you need to dock, have a, follow a heavy documentation process because it was about the tools right it was a lean process of recording all of this information and daily huddle's etcetera. You've then touched on the second most cited issue for clinicians in burn out is more paperwork. More work that takes them away from the work they're looking to do. And so not surprising me, this project over time, in which was 10 million dollars plus investment was showing less and less positive results and actually at the end of this you saw burnout ticking up. So, not only was it not effective, it was detrimental. And so that's just an example to show how would the design process have approached that differently to recognize that you're starting with the clinicians in their context to design around and with, versus this top-down which was really just a big expensive version of prototyping in that piloting. And not only was it enormously expensive in terms of resources and time but you have made the problem worse. Part of it is that unless you're asking the right questions upfront and starting from the right point instead of continuing to sort of beat the drum of how we typically have solved things in healthcare. You have the potential to save significant amounts of resource time and ultimately damage to an organization, which was the case for this health system.

How would you implement this in an organization that doesn't already have the culture of asking questions and exploring new ways of thinking?

Oftentimes, when I'm working with health systems or QIO's, I'll ask them to more important than again any of the tools or the process itself is to look at where are those ripe environments within and or across the organization and with the idea that you want to start small. You don't want to start with, let's create an innovation initiative or Institute or whatever most health systems actually do. It's where is this work already happens because that's where design will be most beneficial when you can sort of swim with, run with. Right? The work and the momentum and the people that are already in these spaces.

So, part of it is that assessment upfront what are the right problems and what are the right set of people that are already doing this work that are comfortable in this space where Human Centered Design will be a supplement or Design Thinking will be a supplement to that work and to those people. And that's instead of trying to convince or drag people kicking and screaming, that yes this is the new thing that everyone needs to buy into. Now instead really invest heavily in those small nodes, those ripe environments where it's most likely to succeed and actually benefit the organization. And so that's usually the start point for this work. Where are those ripe environments that you can sort of see it across the organization and start very small? Because again it's much quicker, it's much cheaper and you'll be able to see pretty quickly to benefit, the ROI on those initiatives.

Great thank you. How would an organization establish a structure for human centered design?

I've often argued that the biggest barrier to innovation and even improvement oftentimes is just a lack of opportunity. The lack of space to do it. Because we have these clogs of doing things, the way things have always been done. Where do we craft that space? So, in those nodes that I mentioned, you would be looking to implement and create that studio structure. So, in an organization I used to work with we created positions of fellowship programs for participants to carve out some time, because that's what people need more than anything. So, you fund the space and time for people to actually do this and walk through that studio process. Guided by that studio iterative, learning your way forward process. If you can create that infrastructure, that's going to create the most welcome positive outcomes. And the other thing you really need to look for is who are those leaders that are going to support this. Because I can't just live on the ground or in this small space. But whereas a leader, buy-in, that will help grow these things, replicate them outside of those small nodes in which you're starting. And so those leaders that similarly have comfort in creating space to ask those bigger questions, not just this is now how we're going to do all of our improvement and/or innovation work but create a small space to investigate and ask different questions about all those paper clips we're dealing with in healthcare.

Ok thanks. And how would we train all of our staff in human centered design?

I think you don't. I think that's the problem that that's been the challenge with how organizations have approached this is again that sort of bootcamp. The two-day event that organizations will bring in a consultant and they'll do some interesting, quirky activities oftentimes designing for something that isn't even relevant to healthcare, right. One of the common things is like redesigning a wallet or a lunch experience which as a designer to make the leap from how I design a wallet to how do I design for healthcare experiences, that would be quite the leap. So, part of it is again, going deep with smaller subsets of the organization to start. Certainly, raising awareness across the organization about what this is and how it might be beneficial, but truly training. Creating that longitudinal space, again this is a doing to think orientation. So really you just have to start doing it and dive into the work. And usually a good consultant will walk folks, coach folks, support folks working on a particular challenge within your organization. That's going to be far more

effective for A, creating any meaningful change and B, creating designers that have, that I mentioned the practice of understanding design which is really different than that conceptual understanding. That's going to create the folks who are going to understand design and adapt it to wherever that organization is at because it shouldn't look the same organization to organization or even industry to industry

Great thank you. You make it sound easy. How would this be scaled at the organizational level?

I think it's about design and the unexpected and allowing for more organic growth. That's why you start with a sort of nodes that are going to be the most successful for this. But for QIO's for instance, it's when you're submitting proposals that you're creating space and you're writing in opportunities for designed to be part of that process particularly in that upfront work. And, because CMS is increasingly talking about and funding work connected to Human Centered Design or Design Thinking. That's potentially a competitive advantage so, part of it is just by doing it. You grow within the organization. The other thing is that you're working on the work that matters most to the organization. So again, it's that back and forth of where is this going to be the best fit within your organization. And then with the tension of where is the work that matters most to the leadership of that organization. Because again without one or the other you're just going to be spinning a bit and that's where most of the frustration comes in whether it's improvement or design thinking or what have you is that if there's not the buy-in, if there's not the support to actually do it and move the work forward beyond the sort of coming up with a bunch of ideas then you just sort of sour people to it. And again, it's more potentially detrimental than anything. So, if you don't have those things, the recommendation is don't scale it, right. So, start small and I'll show again in part two some of those examples will show like how the project's how the work itself was the best way to serve launch and grow across these organizations.

Great thank you, and finally where can we go to learn more?

You can certainly reach out to me. My contact information is on the title page, I think. But I would say one of the better places is that CDC article I cited. That's the most comprehensive one-stop shop I would say for understanding whether the different places that design has been implemented and various initiatives within the health system. It also cites most of the relevant peer review literature in design thinking or Human Centered Design in Healthcare. So, I would say that's probably your best one-stop start point and it can connect you to an awful lot of projects organizations and literature. In a way, if you just sort of Google, you get a lot of bloggie type or design peer review resources. The CDC is a, if you start there you could spend some time really understanding the different forms that design might take within our health systems.

Okay thank you so much Jess for a great presentation. And, thank you to all who have joined us for this on-demand event today. Please remember that the atom Alliance staff is here to help you and don't hesitate to contact us if you have questions or need technical assistance with your improvement initiatives. Please also connect with us through your

favorite social media channels for more opportunities to network and engage. Thank you again for joining us and have a wonderful day.