

# **Storytelling and Data Visualization webinar 0**

Good afternoon, everyone. Welcome to our May webinar, Sharing the Impact of Home Visiting through Storytelling and Data Visualization. This is Nancy Topping-Tailby from Home Visiting Impact. And I'm happy to have you with us today.

A few participation reminders, we do want to hear you. So please mute your phone by pressing star and pound if it's noisy where you are. And mute your computer speakers if you hear an echo. If you're having any difficulty, which we hope will not be the case with the audio component, we encourage you to call in at 866-817-4709 rather than use your computer speakers, if that's an issue for you.

We expect to have a robust chat. So we hope that you will use the chat for your comments and questions. As always, we are recording. If you do have any technical support issues, please use the technical support box underneath your screen to reach our support team. And we'll try and respond as quickly as possible to resolve your issue.

We have a number of handouts that are in the file share pod that's directly below the screen. And we have both of the slides that Andy Goodman and that Stephanie Evergreen are sharing today, as well as handouts that you will want to use during the presentation.

So as they get to their piece of the presentation, they'll tell you which ones to grab. But you may want to go ahead and download them now so you'll have them available. And then you can open them up at the right time. We do have an evaluation link here. And if you aren't able, for whatever reason, to stay until the end of the presentation, please copy and paste that in so that you will be able to tell us what you thought about the material that you were able to experience.

So with that, I will move ahead and introduce our three presenters today. Our first presenter is Andy Goodman, who is co-founder and director of the Goodman center where he teaches communications and marketing professionals how to reach more people with more impact.

Along with Storytelling as Best Practice, he's the author of Why Bad Ads Happen to Good Causes and Why Bad Presentations Happen to Good Causes. He also publishes a monthly journal, Free Range Thinking, to share best practices in the field of public interest communications.

And he is internationally known for his speeches and workshops on storytelling, and has led over 500 workshops for clients, including, Care, The Nature Conservancy, Noah, The Bill and Melinda Gates Foundation, The Robert Wood Johnson Foundation, and many others.

Our second speaker is Dr. Stephanie Evergreen, who is an internationally recognized data visualization and design expert. She has trained future data nerds the worldwide through keynote presentations and workshops for clients, including Time, Adobe, Head Start, American Institutes for Research, The Rockefeller Foundations, Brookings Institute, and the United Nations.

She writes a popular blog on data presentation at [stephanieevergreen.com](http://stephanieevergreen.com). Her first book, *Presenting Data Effectively-- Communicating Your Findings for Maximum Impact*, was published by Sage in fall of 2013. And the second edition is coming out this month on May 23.

And we have joining us, today, Matthew Poes, who works for James Bell Associates. He is the Technical Assistance Liaison to regions three and nine as part of the DOHVE contract. Matt will be providing information about DOHVE's updated communication tool kit.

Our objectives today-- participants will be able to describe the six questions that a memorable and compelling story must answer, illustrate the differences between journalistic storytelling-- which is primarily intended to inform-- and dramatic narrative-- which is intended to engage and motivate-- articulate the process for developing a data visualization, and identify at least two ways to make the story and the data clear to your audience.

We hope that you'll use this information to assist you in recruiting staff and home visiting participants and sharing your successes with staff and systems of care in your state or territory. We are planning to release several messaging resources soon, including a PowerPoint and two-pager on using infant and early childhood mental health consultation within the home visiting, and some of the messaging resources that you'll see on the webinar, today, that Stephanie has helped us adapt and customize directly for you.

So here we go with our Jump Start the Brain. Kate, do you want to pull these up? So we're going to ask you to complete four questions. The first is, choose a number to complete this sentence. Every story must answer how many questions? We encourage you to take a guess, even if you're not sure if you know the answer. It's all for learning.

Also, true or false, stories are comprised of scenes or summaries. True or false? There are three steps in Stephanie Evergreen's data visualization process. This is next question. And step three, we'll ask you to determine the best chart type So I'll give you a moment.

The range of responses to the first question from the 72 folks that have answered, looks like from one to six. So one person said, "every story must answer most questions." Looks like most of you think that stories are comprised of scenes or summaries.

Looks like a variety of responses to the three steps and whether or not step three is around the best chart type. So as we go through the presentation, you'll hear the presenters talk about these. And then we'll revisit these questions at the end. I'll just give you a moment more.

All right, thanks, Kate. OK, thanks everyone for participating. So it's now my pleasure to turn the presentation over to Andy Goodman, who's going to talk to you about the seven distinguishing qualities of dramatic narrative. Andy?

Thank you Nancy, good morning from Los Angeles. Good afternoon to everybody in other time zones. And to those who I met before-- last June I was in Washington at the Marriott Wardman Park-- and to those who were there before, hello again. Nice to see you, if only virtually. And to those joining for the first time, nice to meet you.

I want to start by talking about the structure of a good story. Excuse me. There's your answer to the question. There are six questions that a good story must answer, in my experience of teaching storytelling all these years. And the first question is, who is the story about?

People are interested in stories, people identify with stories, because you give them someone to identify with. So if someone comes up to you at a party, a business meeting, anywhere, and says, "hey, I've got a great story for you," whether you know it or not, the first question in your mind is, who is this story about? Is it about you? Is it about him? Is it about her? Who we talking about?

Give me the person I can hold on to who will walk me through the terrain of this story. So that's the first thing that has to happen. If human beings are going to identify with and care about the people in the story, you've got to give them someone to hold onto.

The second question that follows right after that is, what do they want? This will seem like maybe a gross oversimplification. But when we're talking about stories, whether it's a two minute story, a two hour movie, a 10 part mini-series, it usually boils down to who is it about and what do they want. And once you know that, then you're ready to go on the journey with them.

The next question is, what stands in their way to make it interesting? If a story is simply about somebody wanted something and they got it, that's not interesting. If someone said to you, "boy, I always wanted to get this car. So I went into the dealership. And I went and bought it." Good for you. It's just not very interesting.

But they say they went to the dealership and they told me they were all out. Well then you go, oh, well then what happened? So the things that stand in your way, the barriers, the obstacles, the wrong turns, the antagonists who rise in opposition, that's what makes stories interesting.

And if you run into a barrier, the next question is, well, what do you do? How do you react? Do you just turn around and go home, curl up in a ball, and start crying? Or do you find some way around it? And in most stories, really good stories, there's usually more than one barrier.

So the next question is, how do they react every time they run into something? And this makes the story more interesting, with every new barrier, more drama, more tension, more interest. Until we get past that final barrier and we get to, hopefully, the goal.

And we answer the question, what happens in the end? Do they get there? Maybe they do, or maybe they don't. Maybe something else happens. But there's a clear resolution.

And then the last question, perhaps the most important of all, what does it mean? Why did we take this journey? What did the people in it learn from it? What did we learn from it? Now again, if you were with us in Washington D.C. last June, this should be a review. This is something we talked about. But if not, if you're new, these are the basic questions that a good story must answer.

So just wanted to review that structure as a starting place, but what I really want to focus on, today, is what distinguishes stories from just the ordinary kind of story that you hear and instantly forget, and the kind of story that you hear and you like.

It stays with you. And you can't wait to tell it to somebody else. And that is really the ballgame. When you can tell stories that other people hear and repeat for you, then you have the world's oldest form of social media working for you.

So what I really want to focus on this morning, or this afternoon, are these seven distinguishing qualities of dramatic narrative. Seven qualities that really make stories stand out, make them compelling and memorable. And to teach this to you, I want to use a real life example from an organization I work with, an organization that many of you know, may actually be a part of, is the Nurse Family Partnership.

If you've never heard of the Nurse Family Partnership-- I can't imagine you have, but just for the record-- it's a home visiting organization that sends registered nurses into the homes of low-income, first time moms to visit them during pregnancy, through the birth of their child, and with regular visits through the first two years of the baby's life.

And thanks to the design of this intervention, they're seeing that the moms are healthier, the kids are healthier, the families are getting off to a stronger start. Now when I went to work with them a number of years ago, they were in good shape in terms of collecting the data that showed that they were making a difference.

In fact, foundations that support Nurse Family Partnership, like the Robert Wood Johnson Foundation, the Edna McConnell Clark Foundation, they told me that they considered Nurse Family Partnership like the gold standard for organizations, in terms of evidence-based programs.

They had the data. They had 15 year longitudinal studies that showed that-- you could talk to teenagers whose mom's were home visited. And these kids were healthier. The moms were healthier. The kids were just-- their lives were off to a much better start.

But all of that data, while being a great thing, was also kind of part of the problem. Because when they would go around to talk about what they did to try and raise attention, raise money, and expand the program, the presentations kind of looked like this, where you had these slides after slides with all this data and not so many stories.

And you'd think, gosh, they should have a wealth of stories. You have these wonderful examples of these nurses going into these homes with these young moms. You'd think they would just be ripe with stories. But they had not really done a good job of collecting them.

So I went to work with them to help them collect some of these stories. And one of the first stories we collected was called "Hillary and Karen." Now we've actually changed some names to protect privacy. But we'll refer to it as "Hillary and Karen." And in the process of writing the story, it wasn't smooth sailing from the start.

We actually didn't have a really great first draft. We improved it. And if you compare the first draft with the second draft, you actually have a great teaching tool. Because in the improvement from one version to the next, I think you have a good illustration of these seven distinguishing qualities that I want to teach you.

So here's what I want to do. I want to read you, not the entire first draft, but just the opening five paragraphs that introduce the characters, tell you who the story's about, and pull you into the world of Hillary and Karen. I want you to listen closely. And then we're going to go back. And we're going to look very closely at that text and what the writer did well and what she could have done better.

So let me read to you now the opening paragraphs of "Hillary and Karen." It's just five paragraphs, so sit back and listen. And by the way, this handout is available to you. It's one of the handouts that they have. If you want to download it and read it for yourselves, you can do that now. It's only one page. But if you haven't done it, not a problem. Here comes "Hillary and Karen" version one.

"What does it take to keep a pregnant teenage girl from dropping out of school and raising a child on welfare? It takes the dedication of someone like Hillary Park, a seven-year veteran of the Nurse Family Partnership program. When Hillary is assigned a pregnant teenage client, she has two goals for the girl-- one, to have a healthy pregnancy with a full-term delivery, and two, to stay in school.

'School is their future, their whole life,' Hillary says. 'I do not want them to become a statistic, another teenage dropout. I want to show them a world of success, rather than a world of failure.' Karen Mendoza of Elkins Park, Pennsylvania, just outside of Philadelphia, is one of Hillary and NFP's success stories.

Pregnant at 14, Karen was referred to the program by three separate organizations, the young parents program at her high school, Women, Infants, and Children-- a federally funded food nutrition service-- and her prenatal doctor.

'When I first met Karen, she was shy and quiet, which is typical of young girls when you first meet them,' says Hilary. As for Karen's take on the first meeting, 'I felt scared,' she says. 'I didn't know what to do.'"

OK, so there you have it, the first five paragraphs. I hope it sounded good to you. But let's take a closer look. Here are the first two paragraphs. And just look at the first paragraph.

Remember I said before that the essence of a good story, it starts by answering the question, who is this story about, right? Who is the protagonist of this story? So the first question we have in the first paragraph is, has the writer introduced the protagonist? Is it clear to you who you're going to be following through this story?

Now if it is, answer me in the chat box. Has the writer introduced the protagonist, yes or no. And if so, who is it? Take a moment, I'll look to see if you have an answer in the chat box. OK, Drew Allen Riley says, "yes, it's Hillary." OK. And so Michelle [? Pals ?] says the same thing.

So, yeah, it would appear from this first paragraph that our protagonist is Hillary Park. She's the one we're going to follow. So we're off to a good start, no problem there.

Next question, does this paragraph raise a question in your mind about what's going to happen? Or does it more suggest a conclusion as to how it's all going to turn out? So answer that question in the chat box. In your mind, does it raise a question or suggest a conclusion? What do you think?

Lisa [? Candel ?] says, "it suggests a conclusion." And you're absolutely right, Lisa. It does. Because look at what it says, here. "What does it take to keep a pregnant girl from dropping out? It takes Hillary Park." So right in the first paragraph we've already started to drain the drama from the story.

Rather than having a paragraph that drives us deeper into the story to find out what's going to happen, right away the writer has told us, you know what, it's all going to turn out fine. And in dramatic narrative, you don't want to do that. You want every sentence, every paragraph, to be driving the reader or the listener deeper in the story to find out what happens next.

All right, let's look at the next paragraph. Now we have some numbered items. "When Hillary is assigned a client, she has two goals-- one, to have a healthy pregnancy, two, to stay in school. When you heard me reading those numbered items to you before, when you see them now, how does that affect the tone of the piece as you as you listen to it again?

Give me your answer in the chat box. How does it affect the tone? Does it feel like a story to you? Ann writes, "boring." [? Everette ?] said, "dry." "More clinical," "more academic," "prescriptive," "more like a report"-- all good, you're all right. Thank you for that.

You know, when someone tells you a story, they usually don't have numbered items, right? If I said to you, hey, what'd you do this weekend? You probably wouldn't respond, "well, let's see. Number one, I went to the movies. Two, we had dinner. Three, I went shopping."

You don't do that. But the writer's given us these numbered items. So while we're trying to tell a story that's going to pull you in and make you care, already it feels more clinical.

OK, next question, to whom is Hillary speaking? We hear her say, "school is their future, their whole life. I do not want them to become a statistic." To whom is she speaking? And would you call this dialogue? What do you think? Again, look in the chat box. To whom is she speaking?

Robert [? Osler ?] from Utah says, "she's speaking to you, the reader." That's exactly right, Robert. She's speaking to-- well, she's essentially speaking to the writer, or the journalist, who wrote this story and through them to you, the reader. So she's kind of breaking the fourth wall. Instead of talking to someone within the story, she's talking to you. So it's not dialogue.

And again, if we want to create a sense of a story, of something going on that we're watching and caring about, it's a very delicate thing. And we kind of burst the bubble when the people in the story talk directly to us.

OK, next paragraph starts-- you see there, "Karen Mendoza of Elkins Park"? Point of view is an important thing in storytelling. We want to know who we're following. Are we following Karen? Are we following Hillary? Who are we following? If we want to have a consistent point of view, that makes it easier for us to take the story in.

And also, we want to feel like we're inside the story as opposed to outside the story. So question, from whose point of view is this story being told? And do you feel like you're inside or outside the story? Well, most of you feel like you're outside the story.

And Patricia Mills has it right. It's really from the writer's point of view. Sometimes we're looking at Karen. Sometimes we're looking at Hillary. But we're not seeing the story, specifically, from one of their perspectives, which would pull us inside the story. So unconsciously, the writer has, again, made a choice that pushes us away from the story.

Now there's some additional information in this paragraph. Karen is a success story referred by three separate programs, et cetera, et cetera. When a writer gives us more information, it can increase the tension around what's going to happen, it can decrease the tension by answering questions, or neither. It can just be more information.

So how about for you? More information, increase the tension, decrease the tension, what do you think? [? Alora ?] says, "it decreases." Amanda says "neither, it's just more information." "Decrease." "Decrease."

Yeah, either people are feeling that it's just more information or it's decreasing the tension, when, in fact, what you really want to do is you want to increase the tension. You want people leaning further and further forward in their seat going, what's going to happen?

All right, last two paragraphs, again, to whom is Hillary speaking? To whom is Karen speaking? And is this dialogue? What do you think?

Once again Amanda's got it right. She says they're talking to the interviewer, so it's not dialogue. So while these first five paragraphs are nicely written and it's clean, it's grammatical, et cetera, the writer has done a number of things to make the story feel kind of journalistic, and flat, and report like, and not pull us in.

And to her credit, we gave her that feedback. And we said, you know what, this isn't what we're looking for. There's plenty of data. There's plenty of journalism happening on the website. We want a story that makes us feel like we're there. So let's go back and try again.

And to her credit, she did. And she gave us version two. So what I want to do, now, is, again, I want to read you version two, not the whole thing, only the first four paragraphs, again, designed

to introduce the characters and pull us in. And then we'll go through it, just like we did. And we'll take a closer look. So let's listen carefully. Here's "Hillary and Karen," version two.

"As Hillary Park scans the file of her newest client, Karen Mendoza, she looks carefully for any red flags. Is Karen using drugs? The report says no. Drinking? Another no. Hillary feels a measure of relief. But when she scans further down the page, she spots red flag number one.

Newly pregnant, and about to receive her first visit from Hillary, Karen is all of 14 years old. Driving through the outskirts of Philadelphia to Karen's home, Hillary is concerned but optimistic. After seven years with the Chester County chapter of the Nurse Family Partnership, she has a laser focus on her goals for the girls she works with-- to have a healthy pregnancy with a full-term delivery, and to stay in school.

But Hillary knows full well that guiding Karen through her pregnancy in the first two years of motherhood will be only part of this assignment. She will also have to deal with issues particular to younger teenage girls-- increasing schoolwork, body image, and boys. Hillary can only shake her head as she wonders how Karen will handle these issues when also faced with the stresses of pregnancy and motherhood.

Sitting quietly at the kitchen table with her mother by her side, Karen is an easy study. She is young and looks it with her hair pulled back into a ponytail and sporting a puffy white jacket that she never takes off, even indoors. It's clear from her downcast eyes and virtual silence that she is shy and terrified."

All right, same story, but a very different feel. So let's take a closer look. Again first paragraph, same question, has the writer introduced the protagonist? Is it clear to you who you're going to be following through this story?

Hope says, "yes." Amanda says, "it's Hillary." And you're absolutely right. In fact, look at that first sentence. "As Hillary Parks scans the file"-- we are literally seeing the story through her eyes. The writer is telling us even though both characters have been introduced, we know we've got a clear protagonist. It's Hilary.

Second question, does this paragraph more raise a question in your mind about what's going to happen in the story or does it telegraph the conclusion? Amanda says, "raises the question." You're right, Amanda, it does.

There's no red flags, here, with drugs and drinking. That's great. But look, Hillary realizes her client is 14 years old. And just think about all the challenges that brings with it. And there's nothing in this paragraph that says it's all going to turn out fine. So we have to read on.

OK, next paragraph. Now certainly this story has happened in the past. But as it's written, does it feel to you, does it sound to you like it's happening now, that we're in the moment, or more like we're looking back? I hope I'm pronouncing your name correctly, Drew Allen Reilly. You nailed it.

You say that by putting this version in the present tense, it keeps us more engaged. And that's exactly right. If you'll take a look at these two paragraphs, the story's written in the present tense. "Hillary scans the file." "She looks carefully." "She's driving." "She is concerned."

The writer has made a conscious decision, here, to write this story in the present tense, even though it happened the past. It makes it feel more immediate like we're there. And how is the tone, here, different from the paragraph in version one with the numbered items?

Again, Hillary has two goals, here, but they're not numbered. So how does this sound to you? Does it sound a little more informal, a little more like a story? Tracy Marshall says, "paints a picture." Nicely done.

All right, next two paragraphs. You see that paragraph, "but Hillary knows full well." Again, we're giving you more information. And again, the question, does this additional information increase or decrease the tension over how the story will turn out?

Lisa says, "increase." Nadine agrees, "more conflict, more barriers." Everyone says it increases. And you're absolutely right, definitely getting more tension.

Last paragraph, reading this paragraph, again, do you feel like you're inside or outside the story? Where do you feel like you are? Amanda says, "inside at the table." Melissa, the same thing. Ashley, "inside." You all got it.

We are in the story. And do you have a better picture of Karen than you did in version one? I think you do. You've got the ponytail and the white jacket. OK.

Good, well thank you everybody for answering those questions. You are right on it. So let's go back and summarize. What did we see here? Number one, stories are comprised of scenes, or scenes and summary, never summary alone.

So that opening question was a bit tricky. We asked you if stories were comprised of scenes or summary. They can be comprised of scenes, but never just summary-- so scenes, or scenes and summary, but never just summary. So if you said false, you'd actually have been right.

This is a way of thinking about your story. You have these scenes, these moments, which feel like we're in the moment with the characters talking to each other, like a scene in a TV show or a movie. And in that scene, we hear dialogue. The characters are talking to each other, rich details, the puffy white jacket, seated at the kitchen table. And the sense of immediacy, we're writing in the present tense. Summary is the connective tissue. In summary, two weeks can pass, a year can pass, et cetera. But the scenes are where the story comes alive.

Second, good dramatic narrative, readers experience the action as if it's happening in real time. We feel like we're right there. And as you pointed out, look at this first paragraph and notice how it's in present tense.

You don't have to do that. You can write a story in past tense. And with really good eye for detail, we can feel like we're there. But it's a nice thing to try. The next time you write a story, try writing in the present tense, even if it happened a month ago, a year ago, and see how it just feels more immediate.

Anything that makes someone feel like they're in the moment, at risk, is better. We have to stay until the end of the story to learn what happens.

This is a big difference from journalism. In journalism, they teach you something called the inverted pyramid like you see here. At the very top of the story, all the most important stuff-- who, what, when, where, why. And then succeedingly less and less important details, because people are busy. They may only read the first couple of paragraphs.

Dramatic narrative is the exact opposite. In dramatic narrative, we start with just a few facts and we gradually add, and widen, and deepen, until we've told the whole story. And you can't leave early. You've got to stay to the end to find out what happens.

And because you've made that investment, you have an emotional response. Oh, so that's what happened. I'm so happy to hear it. I'm so sad to hear it. Whatever, I'm feeling something. And when you get your audience to start feeling something, they're one step closer to doing something.

Now this is a very important distinction. I want to make sure it's clear. Because so many people will learn this and they'll slip right back into journalistic storytelling. And I want to show you a classic example outside the world we're talking about here.

I had a chance to work with the Nature Conservancy. You familiar with them? Multibillion dollar nonprofit doing wonderful work, conserving land and species, I taught them this distinction, came back six months later to see how they were doing. I said, "how you doing Nature Conservancy? How's your storytelling?" They said, "great, look at this page from our website, Inspiring Stories, Our Latest Forest Work."

But that got me very excited. Look, I see the word inspiring. I think, hey, I'm going to be inspired, right? So I said, "which inspiring story should I read?" They said, "click anywhere you like." So I said, "all right, I'm going to"-- see, there, towards the bottom of the page-- "I'm going to click on Tracking Florida Bears because I like bears.

So I clicked on that page, clicked on that link. It took me to this page. And there's your inspiring story by Judy [? Oldhouse. ?] You see it starts there and goes on. You can't see. It goes on for about 500, 700 words. But before they want to read the inspiring story, they want you to read that box with three bullet points.

Because as we all know, inspiration starts with a box of bullet points. [CHUCKLES] I think the word sarcasm should be flashing on your screen. No, seriously, they want you to read that box with three bullet points. Let me blow it up for you. Take a moment to read that. Seriously, read it. Then I've got two questions for you.

Now my first question is, don't you love the idea of text messaging bears? I just love that. It's like, "Boo-Boo have discovered picnic basket. Yogi."

But here's my serious question. If you read those three bullets are you going to read the whole story? Yes or no. Are you going to read the whole story? I'm getting a raft of noes in the chat box. No. Why not? Why aren't you going to read the whole story?

That's right, because they've given you the ending. They've told you the most important parts. So why would you go on this magical mystery tour? Why would you go through this whole process if you know what happens? They've subverted this notion of dramatic narrative storytelling.

Good storytellers know not to do this. Out here in Los Angeles, where I live, the people write the stories that we spend millions of dollars seeing every weekend at the movie theater, they know not to do this. When they put out their movie poster, they don't put that next to it. I assume most of you have seen this movie. [CHUCKLES]

All right. Four, characters speak to each other and not an unseen audience. And they talk like real people. You see these paragraphs from version one? Take a good close look at your screen, there, particularly on the right side. You see that big white area? Boom. This is the number one mistake.

When people take my classes in storytelling, the most common mistake is that they have these journalistic quotes. So when you write a story, when your characters speak in your story, ask yourself, to whom are they speaking? If they're not talking to each other, or talking to themselves, for that matter, then you have suddenly returned to the world of journalistic quotes.

Five, as we read, we feel like we are inside the scenes. I don't think I need to belabor that point. Six, good stories are concise but contain enough details to paint vivid pictures. If you want to keep it short, you have to come up with what I call the telling detail, just the detail that really paints a picture. I'll give you a good example from another story.

In one of our classes, we had someone from a mining town in West Virginia. And she wanted to get across the point that the life of the town was controlled by the mining company. And this mining company was cheap. And they were squeezing every penny they could out of the people who lived there and worked the mines.

And she had one beautiful detail that really painted the picture. And here it is in two sentences. Isn't that something? That's how they lit the streets. You had to leave your porch lights on. They wouldn't even spend money for street lights. That's what I call a telling detail.

Lastly, good stories engage our emotions, not to be manipulative, not to be melodramatic, but because it's important. If you want someone to actually do something as a result of hearing or reading your story, if you want them to sign up, to join, to give, to march, to change, people don't do until they feel.

I wrote about this in one of my newsletters. There's the road to action-- see, feel, do. First, you've got to see it. Either you actually see it happen on the screen, or you see it in your mind's eye. And then you can start to feel it. I can feel something. I start to care. And now I'm ready to do.

So the reason we want to engage people's emotions is, if people don't care, they don't do. That is just human nature. They don't care. They don't do. So stories generate emotions. Ira Glass, the host of This American Life has a wonderful quote. He says, "stories are engines of empathy."

So those are the seven distinguishing qualities. You can download that as a separate PDF along with the story of "Hillary and Karen." But I just want to throw it open there for any other questions or comments in the chat box. I think we have a couple minutes left. Nancy, you can correct me if I'm wrong. I think I have a couple minutes where we can take some questions. And then I'll turn it back to Nancy.

Absolutely, thank you, Andy. So people can ask questions, now, in the chat. And also Andy will be sticking around for the rest of the presentation. So if you think of things later, you can also put them in at a later point.

I see a couple of people are typing. So I'm going to give you another few seconds to think about it. OK, very good question from Nadine. She says, "what do you think about the decision of whether a story about an intervention should frame the staff or the clients as protagonists?"

So how do you choose your protagonist? It's a very good question. I think that the important thing to consider in choosing a protagonist is, remember, when we tell a story, we want our audience to identify with the protagonist. We want them to really hook onto the protagonist.

So I would say to you, Nadine, it really depends on who are you telling the story to. If you were talking to a bunch of colleagues, people who work in a home visiting program, and you wanted them to understand something, you would probably tell it from the staff's point of view. That's probably what they would identify with.

If you were talking to a group of young mothers, trying to get them, perhaps, to enroll in the program, you might tell the story from the point of view of a young mother because that's who they're most likely to identify with.

That's not always the rule. But in general, I would say, in choosing a protagonist, ask yourself who is my audience? Who are they most likely to connect with? Can I make that person the protagonist? So Nadine, good question.

Rachel has an excellent question. How do you get people to spend the time to read a story at all? How long should these stories be? Well, as we know that-- if you're telling stories on the web, Rachel, I'll tell you, number one, that video is your best friend.

People do not read a lot on the web. If you put a 700, 800 word story on the web that would take five to seven minutes to read, no one wants to press their nose against the screen and read 700

words off the screen. So if you want to tell stories on the web, video is your best friend, followed closely by audio, or the equivalent of a slide show, pictures with not so much text.

If you're telling a story in a presentation, people will generally give you two to three minutes. Again, if you're boring, 30 seconds is too much. If you're interesting, you can go longer. But in general, you have about two or three minutes. Any other questions that I can answer at this time?

Ramona's asked a question which I'm not sure how to interpret. You say, "how would these stories be perceived by federal agencies?" If you're asking the question-- let me see if I can interpret that question. Please keep in mind that what I am not saying today is just tell stories and all will be fine.

What I'm saying is that in the act of persuasion, the act of getting someone to really pay attention and think about something, consider changing, or doing, starts with a story that gets them to connect and feel something, and is supported by data, which says we have more than one story to tell.

So the reason Nurse Family Partnership is an apt example is they had tons of data. This was an evidence-based program that had evidence up the wazoo. But what they didn't have was the stories. And so I think that adding stories to the mix was, for them, the missing ingredient.

So, Andy, maybe there's time for one more question about what has been your most valuable tool to tell a story-- for Rebecca.

That's an interesting question, Rebecca. What has been my most valuable tool to tell a story? I would say that it's not so much the tool. It's not so much did I have a great video to tell a story, did I have great pictures to tell a story. Because certainly, it's great to have those things to tell a story.

I think the most valuable thing in telling the story is the content itself, is having a good story to tell with all the ups and downs, a story that answers the six questions that we talked about at the beginning. If you have that, then I think all the tools will be at your service. And if you don't have that, no tool is going to save you.

I think, with that, let me turn it back to Nancy. And again, I'll stick around at the end if there are additional questions. Nancy?

Thanks so much, Andy. So we're going to actually switch gears now and turn it over to Stephanie. So we're just going to switch out. So bear with us for just a moment. And it's my pleasure to introduce Stephanie Evergreen.

Thanks so much, Nancy. I'm really excited to be here. I love Andy's work. I'm excited that I can build on it, here, and talk specifically about presenting data. And I was going to start, actually, with the same thing that Andy just said. What we know from the research without a doubt is that the way we persuade people is with stories and with numbers.

We need both of those things together if we're really going to get people hooked in to what we have to say. So I'm going to share with you in my time here, some tools and handouts so that you can present effectively and talk about your home visiting work with clarity.

So we're going to start with the four step visualization process handout. So you're going to see this down in the Files section. If you don't see it, just use your scroll bar. You're going to see Evergreen Data Four Step Vis Process. It's a PDF that I want you to open now.

And that PDF is going to have two of these handouts. Basically, we only really need a half a page. So you get two for the price of one.

So I want to talk you through how this four step process is going to help you either correct bad visuals or build new ones when you have just some tables, numbers, that you need to work with.

And I created this process because what I have seen in my work is that everyone wants to start with step three, what's the best chart type. I'll get these emails all day. Stephanie, I've got some data about home visiting. What's the best chart type?

And the answer is always, always going to be, it depends. Because it's an impossible question to answer. And no one wants to hear, it depends. That's not helpful. So what the things that it really depends on are steps one and two. So that's why we're going to start with those.

And step one is, what's the point? What are we really here for? What are we really trying to say? What's our point when we're talking about these numbers? What is the point? And this is, actually, a very beautiful thing because it means that if we don't have a point we don't need to graph it.

Yeah, this liberated me once I realized it. Because the way that my life was back in the day when I was working at the University, we were working with a lot of nonprofits. And we would survey their clientele.

And because we were a very good survey methodologist, we would always start our survey with a lot of demographic questions. Oh, tell us about yourself. And then we would report our data out in the same order we asked those questions on the survey, which meant we had like 10 pages of pie charts on demographics that meant nothing to people.

And by the time we got to a graph that had a point to it, they were so exhausted at looking at graphs that they kind of just didn't care anymore. So we're going to reserve the power of the visual. And we're only going to put it on things that have a point. It's a really beautiful thing.

So that means we have to know our point. And if we don't have that, we end up in horrible situations like this where we've got bad graphs, and we have bad titles, and it's just not really clear what our point is at all. And so most people will give up pretty fast. If they don't readily see a point, they're going to give up.

I mean, some people might say, oh, well the point was to show attendee breakfast preferences. And that is not a valid point. Everybody is going to go, well, so what about them. And we can't answer that so what question, here, because we don't know the point.

So most people will give up. A few people will try. They'll have to dig into the graph a bit to see if maybe there is a point in here that they could pull out if they're pressed to do so. And because the visual is so bad, they're going to have a really hard time finding any meaningful points in here.

So let's do a little test to see just how bad this visual is at helping us figure out what the data saying. The cereal pie wedge, here, is in the front. It's the green one. And in the back left, in this periwinkle color, we have Just a Pile of Bacon.

Which one of these two breakfast options was more popular among the attendees? Was it Cereal, or was it Just a Pile of Bacon, or were they exactly the same? Put your answer into the chat box, here. So you can say bacon. You can say cereal. Or you can say they're exactly the same.

So Cindy said, "unable to really tell." And honey, that's not one of the options. You have to pick bacon, cereal, or they're exactly the same. That's what the data's really asking us to do, right? That's why we're here to show it is because we want people to be able to read it and make some sense.

All right, we've got a lot of stuff coming in-- lots of bacons, lots of sames, a few people who are cereal holdouts. Great. OK, so we'll reveal some answers to this as we go. But it's difficult, right? It's really difficult. Cindy's saying, "if I have to pick, it's pile of bacon."

And you're like, you have to pick, because I told you to. But it's difficult to work with data like this, especially if we don't have a point. So we're always going to start with that.

So before I even start looking in my graph options, I'm going to think through what my story really is here. And my point, when I look at this data, is that attendee breakfast preferences focused on protein. But a lot of them didn't eat breakfast at all. Could you tell that was my point back here? I don't think so.

I'm pretty sure that my point would be completely buried. You would look at this all day and never really guess that that's what I was trying to say, So I'm going to write my point out in a full sentence here. "Attendee breakfast preferences focus on protein, but a significant number didn't eat breakfast at all."

This is going to frame everything else that I do. So I have to start by articulating this point. And then that point's going to become the title, and maybe even the subtitle, of my graph. So I'm framing the story right up here in that title space, that precious, precious title space that we get.

I think we always end up with these three-word partial phrases for titles-- "Attendee Breakfast Preferences." And I think we get there because we make our graphs in Excel. And Excel gives us

this two word chart title, totally generic, centered in the middle of the graph. And we put in two equally generic words, or maybe three-- "Attendee Breakfast Preferences."

And people have no idea what we're talking about. But we have an opportunity, here, with that title box to actually declare ourselves a point. So we're going to write it out as a whole sentence with a period at the end and a capital at the beginning. So that when people look at it, they think, oh, I'm about to get a whole sentence.

This is going to have subject-verb agreement. When people don't see a period, when they see capitals on every word, they think they're going to get some partial phrase that won't make any sense. So it'll be chunky, and it won't really be coherent. But when they see sentence case with a period at the end, they know they're going to get a whole sentence,

I can't underestimate to you-- let me say that again, I can't emphasize how important it is to really capture what we're trying to say in our title space. And we're seeing some new research coming out that's really validating this idea.

So this came from Michelle Borkin and her team at MIT. She's been doing a lot of research on data visualizations lately. And they did a really amazing study where they hooked up electrodes to people's eye muscles. And they showed them a bunch of graphs. And they were tracking where their eyes go by tracking the muscles in their eyes.

And so they're able to produce these heat maps as a result. And when you look at the heat maps, you can see that people spend a lot of time looking at the visuals. And they spend a lot of time looking at the words that help us decode the visuals, the text boxes, the labels, the things that help us understand the visual part, itself.

And then the second hottest place in the visual is this title area. We really rely on those titles to help us interpret what we're about to see. These titles are really important.

But what was even cooler about this study was that they came back to the study participants two days later and said, "so, tell us about that graph you saw." And the people who were actually able to accurately describe the graphs they had seen were the ones who saw titles that had complete sentences.

In fact, what they were repeating back to the researchers was almost verbatim what that title said two days later. So that's how we get our information hooked into people's brains. OK? The people who saw just the partial phrases for their titles were nowhere near as good at accurately recalling what it was they had seen.

So I know we're here to really talk about the visual. And I'm spending a lot of time telling you about the words. But they're critical. They're critical to our story. OK, so, second step in the four step process is to think through who our audience is.

We have to sort some things out right now. We got to know. Are we talking to members of the public who might have people who are data scared? Are we taking this data to a conference

where we're talking to nerdy scientific peers , where they're going to be expecting me to talk about my confidence interval and stuff like that?

We have to know these things now. We have to know where it's going to appear. Is it in a PowerPoint where I'm going to be there to explain stuff? Or is it going to stand on its own without me there? Is it going to be online where it should be interactive? We have to sort these things out right now, because we can't even open up any software until we figure this stuff out.

And to be honest with you, I often end up going back and forth between points one and two because sometimes your point changes depending on who your audience is, right? So we're going to see that as a little bit of an iterative process.

What's the point, and who is the audience that I'm telling it to? Once we have those things figured out, then we can finally get to step three, what's the best chart type.

So we've got another handout we're going to work with here. It is the Chart Chooser for [INAUDIBLE]. You should see this in the files list. If you scroll down a little bit, you'll definitely see it-- Chart Chooser Handout Version Four. This is an ongoing work in progress.

But the chart chooser's designed to help you figure out what graph type is going to be the best given your point and your audience. When you look at the chart chooser, you're going to see down the left-hand side these gray boxes. And those gray boxes are the main stories that we basically need to tell in our work, like big umbrella kind of stories.

But if you can figure out which one of these gray boxes it is that you're dealing with, then you're going to see this menu of chart choices associated with it that are going to help you tell that story the best. So this gives you some grounding to work within and when you're trying to make some decisions about the best chart type.

Now, I want to talk about-- so at the very top, you're going to see when a single number is important. We've got a couple of options up there. And the big number option is one of them. It's the first one that's up there. You see this big red 23.

And I thought of this when we were listening to Andy's presentation. Because he was talking about that nurse partnership and how they had all that data. And they were showing that slide that had just a bunch of numbers on it. Oh my Lord, yeah, that's going to kill anybody.

The big number strategy, here, you can only use one time. You get one pass at just showing the number. We've seen in the research-- and I'm a PhD. I'm a big data nerd. So I'm always looking at the research. But we've seen the research that says this only works once.

And this isn't something I plan to talk to you about, today. But I know that people use this one a lot, and we just saw on Andy's slides. So I'm going to tell you this research. This research came out of Michigan State University. And they were trying to get study participants to remember just one number, right?

So they showed a third of the participants a pie chart with just that pie wedge highlighted, which is one of the options up there. They showed a third of the participants a bar chart with just that bar highlighted. And then they showed another third just the big number.

And then they came back two days later and asked people, hey what was that number we showed you two days ago? And the people who were best at telling them the right answer were the ones who just saw the big number. But like with Andy's bad example that he was showing you, you can't just have a slide of those. It totally loses its impact.

So you can just show one big number. But you've got to reserve it for like you're one most important thing. Because you can only use it one time.

OK, so I'm thinking back to my breakfast data now. And we might be tempted to think that we're working with parts of a whole here, because the numbers did add up to 100%. But my point here really isn't about, hey, look at how my numbers add up to 100%. My point really isn't that these are parts of a whole.

The story here is really about these survey responses, about what audiences prefer for breakfast. And beyond that, maybe the point further is to highlight that there are some single numbers in there that were really important. And if you look at what this survey says, and if you look at the option for when a single number is important, you're going to see that bar charts show up in both.

So that's what I'm going to do. I'm going to take that pie, and I'm going to turn it into a bar. So here we were. And now we're going to take out the angle. And we're going to turn this into a bar chart. And here we have our answer.

Bacon is still periwinkle. And cereal is still that green bar. And you can see that bacon was a lot more popular. I mean, not even a little bit, like a lot more. They aren't even close to each other. But that's how much the data is distorted when we, first of all, use pie charts, which we're bad at reading and when we include 3D.

Let me go back, just so that you can see the before. When we put 3D, this volume in here, plus an angle for the pie chart, we're taking two things people are bad at interpreting and putting them together. It's very hard for our brains to read that with any kind of accuracy.

So we turn it into a bar. We're better at judging the lengths of things, that's why bar charts are so nice and tidy. But it's still a bit hard to read exactly how popular bacon really is. How popular do you think it is? We have this 20% grid line that's coming up helping us.

But some parts of the bar chart are to the left of that grid line. And some parts are to the right of that grid line, because it still has that 3D in there. So take a guess. Type something into the chat box, here. How popular do you think Just the Pile of Bacon really is? I'll eventually show. Go ahead and type in your guess.

We're getting some good precision in here. I'm getting decimals. This makes me really happy. I'm seeing everything from 18% to 25%. He says 20.4%. OK, good. Good guesses, so keep them coming in whenever you got them.

But our next step, of course, is going to be to take out that 3D. We simply can't do that anymore. So we're going to end up with a flat bar chart, here. This is a 2D bar chart, always 2D, no 3D. So now we have the right chart type, and this is when we're going to get ourselves to step four.

Step four is, now how are we going to sharpen up the point? How are you going to take all the little nitty-gritty default things that Excel gives us and turn it into something that's actually telling our story for us? And so we're going to use things like emphasis techniques, like color, to help bring that point out.

And you have another handout that's going to help you through this process. It's the Data Visualization Checklist. You get lots of handouts from me because I want you to be successful here. So check out the Data Vis Checklist. It's divided up into many sections.

You're totally not going to walk through all of these sections, today. But basically, it details once you have figured out your best chart type, what are you going to do with all the other little bits that your software is going to give you? How are you going to handle all of those things so that what you're trying to say is really clear?

So we're not going to walk through all of these in detail. But I am going to overview what we would do using the Data Vis Checklist by going back to our really bad graphic here and think we can fix it up even more.

OK, so it's a bar chart. And what I changed this time, was I took out the legend. Excel kept the legend in there from when it was a pie. And that was just completely redundant here. So I deleted it. And I got some of my space back.

The next thing I'm going to do is re-order the data so that it's running from greatest to least. Greatest to least is what people really, actually want to see, especially when we're talking about categorical data. When we're just graphing categories of something, people want to know what was most popular, what was least popular. And they don't want to have to find it from some list that is unordered.

And I think what we tend to do is just graph the data in the same way we asked the questions on the survey. But no one ever cares about the order of the question on the survey. What they care about is what's important to them. And that's what's most popular and what's least popular. So this is the point in the Arrangement section of the checklist. We're going to order our data from greatest to least.

Next, we're going to make a little bit of size adjustment, here. So this is in the Font section, the Text section of the checklist, there on the front page. But we're going to deal with font size so that the smallest font size is on the stuff that's least important. And the biggest font is on the stuff that's the most important.

So in this particular example, the least important stuff is the x-axis, that number line down there. So that's going to be the smallest. And the smallest you can deal with on paper is size nine, quite tiny. The smallest you can deal with on a screen is size 20. And that's to ensure that even when you're in a big presentation room, people in the back will be able to see it.

So everything is going to bump up a point or two from there, depending on its level of importance. So Eggs to Fruit Salad, those labels are going to be a point or two larger. Your subtitle will be a point or two larger than that. And your title will be the largest or the darkest thing that's in your visual. That's how we see importance, largest and darkest.

OK, the next thing I'm going to do, I'm going to make a little bit more room, actually, for Eggs to Fruit Salad. I'm going to make more room for those labels by deleting that entire axis and putting the labels inside the bars.

Why would I do that? What do I get when I do that? What's the advantage of deleting that axis and putting the labels in the bars, themselves? Robert says, "they get great contrast." Jason says, "I get my real estate back." Exactly, I get more room for my actual graph.

Patricia says, "clarity." Summer says, "it makes it more obvious." Totally. Ariel says, "everything's more condensed." Yes, it's more condensed. And that makes your eyeballs right on the bars, which is exactly what I'm here to get you to see.

So it focuses us in, exactly. And Virginia, you're right. When I get my real estate back, I get longer bars. So it's easier to see the differences between the bars. Exactly. Perfect.

The next thing I'm going to do to this is get rid of the x-axis line across the bottom, here. You see this little horizontal line with all these tic marks hanging down off of the bottom of that? Yeah, that's all a bunch of chart junk. And it adds clutter to the visual that clouds up our view.

So I'm just going to eliminate it. And it makes for such a cleaner graph. It seems like such a small thing. But those small things really add up to giving us something that's cleaner. And that's going to be something that's in the Lines section of the checklist.

OK, my next step is to add in some color. Color is critical, here. We're never going to use the Excel default color scheme, OK? Because it's not our brand. Our brand is not, we're the defaults. And it makes everything seem important.

But everything in here isn't important. We already know what's important because it's in my title. So I'm going to use gray on every part of this graph. And then I'm going to add an action color to the parts of the graph that are really capturing my point.

Now the title is so clearly connected to the graph, it's really hard to ignore. And you're welcome to look at Cereal all day, if that's what's really important to you. I'm not hiding it. I'm just saying it's not germane right now. I'm going to use color to highlight the things that are germane.

OK, so my next step, here-- and this is in the Overall section of the checklist-- is to think about the level of precision that I really need. If the overall pattern here, the general pattern, just knowing that eggs was more popular than bacon, if that sort of thing is all I really need to show, then I'm going to use my x-axis and I'm going to use these vertical grid lines.

But if people need to know the precise numbers, then I'm going to delete that axis and those grid lines. And I'm going to add the precise numbers to the ends of every bar. And so now you know the answer. Just a Pile of Bacon was 21%.

So we went all the way from the 3D exploding pie chart to here. What's my payoff? It's going to take like five minutes of fiddling with Excel. And yes, you do this all in Excel. It's going to take you probably five minutes the first time you do it. It won't take you that long in the future. But the first time you do it, it'll take you five minutes.

So what will I get for that five minute investment, where I travel all the way from the 3D exploding pie chart to here? What do I get? "A chart with purpose," "a teaching tool," "precision," I get "comprehension" and "retention." I get "a clearly articulated message." Exactly, exactly. And you don't have to learn any special software to do it.

OK, so that's the four step process. Now I'm going to show you-- we just did this in one graph, right? But a graph doesn't really live in the ether by itself. It lives inside something else like a slide, or a report, or a fact sheet. And you all deal with fact sheets quite a bit.

So I'm going to take a moment here and walk you through a little before and after with the fact sheet. And I want to thank the folks-- I think it was from Michigan-- who volunteered this fact sheet for me to make over. So this is a page from one of their reports. But it would easily stand on its own as a fact sheet. And they're talking about families served in FY16.

Now I'm going to tell you right now, as I go through this makeover, things are going to get tiny. It's going to be a little hard to see because now we're looking at an entire page. And I'm going to actually have two pages next to each other.

So if you need to see this in a larger view, you're going to look in the upper right of the window. And you're going to see four arrows all pointing outward. That's going to expand this menu, this view here, so that it's full screen.

Now you're not going to be able to type into the chat box there. So you're going to have to click that button again so that you can get to the chat. But I want you to be able to know how to access full screen because we're going to walk through some stuff here.

OK, so we're starting off with-- let's start from the top here. We're starting off with families served in FY16. And this is where Andy's work completely applies. Because families served in FY16 is like a box of bullet points. It's clinical. It's like, can I just turn the page quicker because this doesn't tell me anything. It's insider jargon too, where FY16 isn't language that is common to people who work in other fields, right?

And it's not very detailed. We don't know if we're talking about findings. We don't know if we're talking about the impacts we had on the families we served, or we're talking about demographics. We really don't know. So let's try it, OK? Let's assume that the audience here is public.

What would be a more exciting title? Try something. Type it into the chat box, here. What's going to be something we could say instead of Family Served in FY16 that's going to draw somebody in to reading this whole fact sheet? "Who we helped in 2017" could work. Go a little bit further. Try to give me a full sentence, something that you can put a period at the end. But good job, Robert, for trying it and putting something out there first. It's hard to do.

I see lots of people typing. So let's see what people come up with here. It can be a little tricky to wordsmith a good title. It can take a few minutes. Amy says, "the impact we had on our families in 2016." And she put an exclamation point on it. But I want to know the so what. So what about them?

"Families receive support." Debbie, that's getting me closer. That's, at least, something I could put a period on. "Families with teen mothers served in 2016," period, but that's not a full sentence yet, Susanna. We need a so what in there. "We helped blank families do blank in 2016." Boom, Linda, she's got it.

OK, so keep working with this. But here's what I would do. "This year we served over 2,000 families"-- oh my gosh, exclamation point-- "let us tell you a little something about them." So I cheated. I used the subtitle in there too. But now I know I'm going to tell you about demographics.

Now I can, at least, tell you-- you know what's going on. You know what's ahead. All right. Next up, the first thing we had up here were gender demographics. And I had to make up points as I was going through because I don't really know the program super well.

But what I saw when I was looking at this was, oh my gosh, our clients are 95% female. Wow, this is amazing stuff. Our clients are 95% female. We need to say that. Because that's a really big deal. It's going to get lost in here. And you can see, I've already started color coding in there a little bit.

Next up, we had some race data. And so I'm going to make that into a summary sentence too. "Our clients are mainly black, African American." Then at the bottom, here, I've got some age data. So I'm going to summarize this, where I say, "we generally serve adults under 30 with children under the age of one."

I could tell those things by looking at your data here. But I'm just summarizing it in a way that's going to be clearer than just a title that says age. There's some education data in there too. So I'm going to bring that down and summarize that to say, "most adults have a high school diploma or less."

Now all these points are definitely present. They're buried in this fact sheet on the left, somewhere. But you really have to dig to find those points. So all right, with just framing my

titles here of the different data sections I'm going to share, you can tell so much more about the families that are being served in Michigan.

So we have the points now. And we know that we're going to be sending this off to a public audience. So let's pick the graph that are going to help us support these points. We're going back to the top to talk about gender.

Now, icons can be OK. You'll see on the chart chooser hand out that an icon array is a decent option. But these icons are not going to work. And I'm going to be a little bit blunt about it.

First of all, the icons are quite blurry. And that's going to make you look like you're not professional. That's not cool. The size isn't true. We can see that the icon for women is much larger than the icon for men. But it's not 10 times larger. So the size isn't really functioning, here, as a storytelling data method. The girl and the boy icons look awfully similar to each other. And then we've got color contrasts happening for adults, where women are purple and men are blue. But we don't have that happening for boys and girls.

So I'm going to turn this into a graph instead. And when we're talking about gender, we are talking about parts of a whole. So I'm turning it into a stacked bar. Pie charts could also work. But pie charts are big. And I just didn't have enough room. So I turned this into a stacked bar.

And we can see that children are about 50/50. But adults-- wow, those females-- that's dominating who you work with here. And that's so much more obvious than a slightly larger icon, right? OK. So you can see, here, we're already adding in step four, where we're talking about sharpening up the point. Because I took out grid lines. I've got no chart borders. And I started to use some color coding.

OK, next up, we've got the race data. And I just turned those from columns to bars. Columns are the ones that go up and down like building columns. And bars are the ones that go left to right. I did that for a couple of different reasons.

First of all do you see how, in your original, Native Hawaiian, Other Pacific Islander wraps onto five lines? Oh my gosh, how totally obnoxious. And it does that because we have very long labels here. Whenever you have labels that are starting to wrap onto more than one line, that's your clue that you need to change this from a column to a bar. And when you change it to a bar, the labels are just going to remain horizontal and easy to read.

I also made them exactly the same width. You can see in the original that the adult bars are thicker than the orange children bars. And people are going to get confused by that. They're going to be like, well, why are those thicker than the others. Does that mean something? Is it significant? It isn't. I'm pretty sure. It was just people weren't really looking at it yet. And now they are.

So children and adults are going to be exactly the same. And they're going to be ordered greatest to least. Again, that's what people will really want to know.

We do have ethnicity data that we're starting to show here in the donut charts. Donuts are very hard for people, harder for people to read than pies. Donuts are not good. And they're different sizes, where the adult donut was much smaller than the child donut to talk about Hispanic and Latino. So because, again, those are parts of a whole, I just turned them into a stacked bar. Those are going to be nice and efficient and fit into a small space.

OK, next up, we've got the age data in here. And for adults, I just turned this into a bar chart. And I color coded the bars that capture the target demographic here, those adults who are under the age of 30. And I moved the children from a pie to a bar. And I put these two graphs on the same scale so that we can really, actually, compare them back and forth.

Then the last thing I did to handle this education data-- it's also parts of a whole. So I, again, used the stacked bar. And I used gray plus this action color, this blue here to highlight the groups that were high school diploma or less.

Without that, without the bar itself, when we were just looking at the icons and the before version on the fact sheet there, our brains had to bounce back and forth a lot between these different numbers, 31 bounce over to 41. Well, 41 is bigger. Then I got 20.

It's a lot of bouncing around for our eyes and our brains to have to do. People don't want to work that hard. They're just going to give up if it looks like it's going to be a struggle. So by adding the visual, we're making it instant, instant recognition for them.

I upgraded the icons just a little bit, not too much. And I kept the color on those to help us draw out our point. Those icons, I actually pulled directly from the newest version of PowerPoint. There's a new button in there called Icons. And it gives you these icons that you can just use directly right inside PowerPoint. So it's so great.

OK, so ultimately, you're getting a much stronger storytelling tool with this whole fact sheet that's happening on the right. The new one is really telling us what's going on. It's telling us everything we really need to know.

It's giving you a stronger platform to take to the partners you're trying to get, or to the federal agencies you're trying to work for to say, hey, look at who it is here that we serve. This is our clientele. And it's going to pop out into their face instead of something that they're really going to have to drag through and read.

Other notes, other things that I did here-- you tell me. I did other things to the page, itself, aside from the text, and aside from the graph. I did other things to the page layout. I adjusted some stuff here. What else did I do? What else do you notice? I didn't talk about these things yet. But there were other things that I took out or that I added between these two.

Yeah, I took out the margins. Right, right. The printer is going to add those margins anyway. So yeah, I used the whole page. I took out the border. Good eye, Cindy. We don't really need the border. We really don't. We're just going to let it breathe, OK?

Hope says, "everything's on one page. It's not split into two." Right, and I get why, to try to distinguish adults from children. But we're just going to do that with color coding right inside the bars themselves. Heather says, "no divider line." Exactly, let's not. "It's more readable."

Stacey, one of the reasons why it's more readable is because I used a better font. I used an interesting font. I didn't use Calibri. The reason that we're not going to use Calibri is because Calibri screams default. And we are not a default group. Calibri says my brand is whatever Microsoft gave me and I didn't think about it again. And that is not what we're trying to say to people. Somebody is messing with the slides here. So let's not-- OK, because I want people to be able to see these two things side-by-side.

So Calibri's going to scream default. Let's pick something different that's going to represent us a little bit better. And we're getting good color contrast in here too. Virginia points out, "we've got a simpler color scheme that's going to look OK in black and white." You're right. It's totally going to hold up in black and white. And color on color is going to be a little bit harder for people to read.

Bolton says, "what font is that?" And I want to say I used Open Sans. But other good ones that are going to be in your dropdown menu, in your default menu, are going to be Segoe Black. Segoe Black is a really nice strong font that you can use.

Actually, that may have been what I did here. But Open Sans is a good one that you're going to have to go find for free from the internet. And Milo is another really nice one that's similar to this that you might like. OK, great.

So basically, when I was redoing this fact sheet, went through the four step process for each chunk of data that was being presented there. And so you're going to have these handouts that are going to help you. You're going to have this four step visualization process to help you. You're going to have the Chart Chooser to help you think through step three. And you're going to have the Data Vis Checklist to help you think through step four.

So before I go, I think I have a few minutes for questions, but, Nancy, you can tell me. I do want to thank the Michigan team for allowing me to pick that fact sheet apart. That's a really brave, hard thing to do when you know that there are going to be like 200 people also looking at it.

And I want to point out one more handout that you have in your files here. It's specifically for you all. But it's highlighting the four step process, explaining how you're going to walk through this whole thing here. And I'm showing you another before and after remake that features data that came from the Wisconsin group.

So thanks very much to the Wisconsin team, too, for letting me include that makeover right here. Nancy, do I have time for some questions?

Go for it, Stephanie. Go for it.

I'm just going to hit it anyway. All right, good. OK, so Ramona has a question, here. "In our group, we're wondering if you would segment the page in three rows. Because it's visually still hard to differentiate." Yeah, you're welcome to segment the page even to have more structure, more of a grid in there, if that makes more sense to you. Absolutely.

Ashley says, "I don't see the slides in the downloadable files. Are they available?" The slides are not going to be available. But what I'm going to do is give you this handout here. And I will take out-- let me ask the Michigan team, first, if it's OK, all right?

But I'll take out the slides that were the remake, here, and I will pass that on so that you can see that too, as long as they're OK with me giving out their stuff to everyone. So no promises yet.

I see some questions happening that were from a little bit earlier. Amy, "how are you creating"-- I can't quite see the whole question there. Nancy, would you be able to--

Yeah, it's, "how are you creating this chart that you are able to put the words inside the bars?"

That is all done in Excel. And that's the beautiful thing. Excel, actually, will let us do a lot. We can actually hack Excel to do things it doesn't do by default if we just know what we're doing a little bit more. And I know your next question is like, yeah, so how?

And that is exactly what you're going to find on my website. Not to be too self-promotional, here, but my books and my website tell you exactly what buttons you have to push to make all that stuff happen.

I see a question about fonts. "If you use a font you took off the internet, will your readers who have not downloaded it be able to see it?" Yes, because you're going to PDF your stuff. That's one of the ways that you're going to make that work.

Ramona's other question, "are there tools that help us make sure this works for color blind people." Colorblindness is so critically important for us to take care of. And the Excel default color scheme is horrible for people who are colorblind. So we're never going to use it for yet another reason.

But there are a couple of cool tools out there. If you just Google "colorblindness simulator," you're going to see all these places where you can upload a picture-- you have to take a screenshot. But you'll upload your screenshot of your page or one of your graphs, and it will show you what it looks like to people who have different colorblindness conditions so that you can really test it before you move forward.

Laura, "we need to be careful of font selections, make sure individuals with visual impairments can read the information." Yeah, and in my experience working with 508 compliance and handling things like that, is that people who have visual impairments are going to use screen reader technology. And so it won't really matter too much what font we use if they're using screen reader technology.

We do want to make sure the font is going to be legible, not just for people who have visual impairments, but for people who have normal sight too. We want to make sure it's going to be a nice strong font that people are going to be able to read.

And the fonts that I mentioned to you, like Open Sans Condensed, those are Google fonts, which is very handy. Because when you use those, it means it'll be viewed cross-platform. OK, I went through those question kind of fast. Were there any that I missed, Nancy? Or should I turn this back over to you.

Did you get this one, "in our group, we're wondering if you would segment the page in"--

Yeah.

--"three rows?" Yeah. OK. Trying to just scan to see which ones you answered.

I know, lots of questions. This is usually like a two day workshop. And I'm giving it to you in a half an hour. So there sure is a lot that's going to come up.

So here's one I think you didn't answer, serif versus sans-serif fonts. Some fonts are better for folks with dyslexia.

There are actually funds that have been developed specifically for people with dyslexia, which is pretty cool if you know that's going to be your crowd. But it isn't necessarily a serif or sans-serif issue. Serifs are the fonts that have the little feet on them. And that's what's going to be best for long narrative reading. You can kind of see it in the view that I'm showing here.

The narrative content that I have in there is serif. And serifs are great for paper stuff. But they're not great for reading on a screen because as you can see, they tend to disintegrate a little bit. You want to use a nice sans-serif that has no little feet on it for things that are going to be electronically projected. So that's your basic rule of thumb.

And Laura says, "my counterparts who teach visually impaired students would not agree with picking any font." Right, and I certainly don't think you should pick any font. Like I said, there's much, much more to be said about this. It's an entire chapter in one of my books. But I'm giving you the best that I can possibly tell you in the time that I have here.

All right, well, there's one last question sneaking in. But we really need to move on to give Matt time. But is there a maximum number of different fonts you would use in one document?

Maybe two or three. So serif for your body text, a sans-serif that you're going to use for your headings, and I tend to use the condensed fonts in places like my graphs or my sidebars to visually offset those things, and because the condensed font can help us fit our labels into small spaces inside our data. And then you're going to be incredibly consistent about your use of those and make sure that you use them all the time.

OK, thank you very much, Stephanie.

You're welcome.

All right, we're going to transition now back to Matt, or to Matt, I should say, who, as you know, is the technical assistance liaison to regions three and nine as part of the DOHVE contract. And we're just going to move ahead. And he's going to tell you about some other new work that's coming up soon-- oops, I went ahead-- the communication tool kit. So take it away, Matt.

All right. Thank you, Nancy. Yep, so coming soon is the communications tool kit, including customizable talking points, fact sheets, presentation slides, and charts. So a lot of you guys have been in a position where you were asked to answer questions like, what type of people does your state federal home visiting programs serve? What has your program accomplished over the past few years? And how is your program improving over time?

In June 2015, DOHVE, on behalf of HRSA and ACF, developed and released a toolkit to help grantees communicate their successes and make the home visiting. Many of you have now asked whether these talking points were still relevant because they were specific to performance measures.

And as you know, in 2016, the performance measures had been reworked. So we are actually updating this communication tool kit. And DOHVE, HRSA, and ACF will be working to provide this update for you soon. It's going to include talking points, facts sheets, presentation slides, and charts.

And I want to point out that many of the really nice points that Stephanie was making on how to put together different types of graphs and visuals, were going to be providing you with templates you can use that will help you to encompass a lot of what she's talked about. So that's really all I have at this point to share. And if anyone has any questions, please let me know.

Thank you very much, Matt. So stay tuned, be coming soon. All right, Kate, can we switch back? Oh no, we're in the right place. I'm sorry We're in the right place. OK, so we're back to Jump Start the Brain. I was thinking we were in the PDF for a second and we had to switch.

But we're just where we need to be and was going to end on time and maybe even a moment or two for a question. But we'll see. So here we go with the Jump Start the Brain, take two, again. Let's see what folks think now. Every story must answer how many questions? Six. Stories are comprised of scenes or summaries? Andy, would you like to take this one.

Yeah, it's tricky question because stories can be comprised of scenes. They can be comprised of scenes and summaries, but never summary alone. A story cannot be told in just summary. So the statement, really, is false because while scenes is true, summaries is false. So the wording's a little bit tricky. But it is false.

Yes, and most of you-- 90% of you knew that. And so everyone knows that there are four steps, it looks like, in Stephanie's data visualization process. And step three is, in fact, around determining the best chart type. That is step three. But it's a four step process, not a three step process.

So it sounds like everyone learned quite a lot. Thanks very much. So before we close out, Kate, does anyone have any last minute questions for any of our presenters today? I'll give you one last chance if you do. And if not, we'll give you one or two minutes back.

I see a couple of people are typing. Rebecca says, "thank you, very helpful." All righty, let's see, a few more people. "When is this webinar offered again?" We don't have a plan to offer it again. But we will make it 508 compliant and put it on the portal for those of you who have access to the portal. And also, we'll share it with HRSA, who can make it available through their YouTube channel. I think that's what they do.

So thank you very much for joining us. And before you close for the day, we do ask that you complete the evaluation survey, and watch for more resources coming from both DOHVE and HV-ImpACT with Stephanie's help, and our infant and early childhood mental health consultation resources to help you think about the different audiences that you communicate with and how to have some additional tools to help you in your work. Thank you, and have a great rest of your afternoon. Thanks very much.