Let me start actually with a big thank you to the president, to the Board of Directors, all of you that work in organizations know that the functioning of the board is a really critical element to moving forward an organization and our board of directors are incredibly committed to the work of acting in the public interest.

And without them, we couldn't really achieve half of what we do. But I also want to thank the staff who work so hard for all of you. And to be quite frank, they keep me on my toes, which is something that I welcome, because I really like to always be trying to think about how we can position the organization better for the future.

But most importantly, I want to thank all of you, both our members and our partners that come up with really good questions. Because questions are really important to help challenge our current thinking and ideas. I always remember the words of Albert Einstein, who said, "There's nothing wrong with being unsure. Clever people ask the most questions, and determined people find the answers."

I would contend that as regulators, we're both clever and determined. Now, it's the combination of these factors that makes the difference between a good organization and a great one.

It is our ability to work together that will deliver regulation fit for this current complex digital age. So I know that the title of this presentation may excite some people, and it may frighten others. Julie has just highlighted some of the amazing achievements from the past year, and I'm going to lay out what lies ahead of us.

So as my daughter said to me, the first time that she picked me up from the train station after passing a driving test, "Buckle up, you're in for a trip." So, nurse regulators do not exist in a vacuum. They're part of an ecosystem.
There are other regulators, there are creditors, there are employers, educators, the public, and so many more individuals and groups that interact with the environment, policies, processes, that we all must operate within. So the success of taking successful bold steps is dependent on us understanding that ecosystem.

Now, Andy Andrews, a systems theorist, said, "A butterfly could flap its wings and set molecules of air in motion, which could then move other molecules of air. In turn, moving more molecules of air eventually capable of starting a hurricane on the other side of the planet."

The actions that we take individually and collectively are important in impacting the ecosystem, both here and around the world. Remember that not everything that influences us can be seen. Some of the most powerful forces on this planet are invisible, yet we feel them. As regulators, we can generate a gravitational force that affects not just the lives of patients here in the United States and the practitioners, but around the world.

So over the next 15 minutes or so, I will address four aspects of our journey. To this end, I'm going to look at change, collaboration, and agility. Okay, so what do you think this is about? Any thoughts?

Anyone know what they are? There's a rat and there's a bat. What's that about? Well, both of them are actually vectors of disease. In 1346, bubonic plague, the Black Death, broke out in a small part of Europe. And it took until 1351 for the remainder of Europe to be engulfed. A whole five years. However, today, things are very different. The SARS outbreak in the early 2000s went global in a matter of weeks. Today, the pace of change is phenomenal, and the reach of that change is truly global.

Now, as I move to make my regulatory point, I'm going to ask you to forget the idea of rats and bats as vectors as I'm going to talk about legislators, so I don't want to be any connection between rats and bats and legislators. Okay, that's not there, okay? But I do want you to think about the internet.

Today, politicians no longer are constrained by getting ideas from those that they talk to directly. They are bombarded 24/7, with information from all around the world. Regulatory ideas can and do come from anywhere. Accordingly, we must be proactive in shaping those ideas.

Just as the butterfly, we need to flap our metaphorical wings, communicate our thoughts, and influence the ecosystem in real time. As Gandhi said, "You must be the change you wish to see in the world." We used to live in an analog world, and we now live in a digital society.

And increasingly the way that we see the world and interact with it is through technology. Now, each day, 2.5 exabytes of data are produced. And everyone's going what's an exabyte? Okay, well, an exabyte is a one followed by 18 zeros.

Just remember that a million is a one followed by six zeros. But what does that mean? Well, the data produced every day is equivalent to 250,000 libraries of Congress.
That's the amount of information. Or 90 years worth of high definition video. That's the amount of information that we are having to deal with. So as regulators, more and more of our processes are dependent on technology, and as we identified in regulation 2030, the need for data mining and technology skills is definitely on the increase.

Technology such as Blockchain will play an increasing role in the prevention of regulatory fraud. Artificial Intelligence will undoubtedly play a role in discipline, education, and continuing competence. These changes are already here, but will become increasingly present in our discussions.

We are becoming increasingly data interdependent and as such, our relationships with other regulators, with employers, with creditors, with educators, and other stake holders will change. The theme of collaboration is ever present, and something that needs to be acknowledged, pursued, and indeed celebrated.

"The Wisdom of Crowds," which was a book published in 2004 by James Surowiecki, is a reminder of this. It is about the aggregation of information in groups, resulting in decisions that he argues are often better than those that could be created by approaching a single individual or expert.

The book presents numerous case studies, and indeed anecdotes to illustrate its arguments, and it touches on a number of fields including economics and psychology. But to make the point, Surowiecki used a very simple example of "Who Wants to Be a Millionaire?"

Do you phone a friend or do you ask the audience? By asking someone, a friend that you consider an expert, they will give you the answer correct 65% of the time. But if you ask the audience, they will get it right 91% of the time.

In his book he explores why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations. So the more that we can do together, the better equipped we are to address the challenges.

But the challenge for us is how we formulate our community of contributors, how we engage more people. That is why as we move forward with pursuing our next set of strategic objectives, we will be using digital platforms and crowdsourcing events to develop our work. You will be part of that crowd, you will be part of that digital society where you don't have to travel a number of hours to get to Chicago to participate in a meeting for two or three days.

But in real time, you'll be able to contribute from your office and add more value to the richness of the debate that we are seeking to generate. So our collective wisdom, as I said, is certainly greater than the sum of the individual parts. But collaboration does in fact, deliver results.

Diversity of thoughts and perspective provide solutions that are more comprehensive. The regulation 2030 report brought together 80 individuals and many of you are in the room with very different expertise. We produced a future-oriented analysis of the emergent landscape and this has provided us with a range of topics that needs to be addressed.
The report has been distributed to regulators around the world, and our sister health and social care disciplines have invited us to present the findings to their members. It has resulted in the production of our regulatory Atlas, and this is just, as the title of the report said, is the first steps in a journey.

In sharing, we get more feedback, we add to our understanding of the issues, and we identify opportunities to collaborate. As Julie mentioned, the Citizens Advocacy Center has provided us with a critique, and in short, we've done a great job.

As a result of the 2030 report on the focus of regulatory and occupational licensing reform that we've seen from government, the seven disciplines of medicine, pharmacy, social work, physical therapy, occupational therapy, psychology, and of course, nursing, we work together to map the landscape. Then as nurse regulators, firstly via the executive officer's summit this year, sorry last year, and then through working with colleagues from around the world, we have curated the evidence of how, as nurse regulators, we are acting in the public interest.

So we have answers to the questions that our legislators ask. They are documented and they are evidence-based. But working with our sister organizations is not enough. Nurse regulation is part of that regulatory ecosystem. As such, we need to look beyond nursing and indeed beyond healthcare.

And this is my link back to Scotland. So the Law Society of Scotland produced a very valuable report entitled "Fit for the Future." Many of the issues that we are dealing with are being dealt with by other disciplines, but they come at those issues from a different angle.

And by examining their solutions, we are often better placed to come up with creative and innovative ideas for ours. Also the accountancy firm KPMG and Deloitte as well, they regularly provide resources that offer insights from their perspective that we can ruminate upon and use in relation to some of the challenges we face.

So let me remind you about the value of others. Nightingale did not learn her nursing in the United Kingdom. She went abroad, and she brought her thoughts back to the U.K. and as a result of having that interaction abroad, she was able to define a new movement, a social movement to really advance nursing.

The reason, however, that she was listened to was not because of her nursing, but by her use of statistics. On a personal point, early in my career, my then boss Judith Lavender, she said to me, "You need to go and look at how things are done elsewhere." A comparative lens is a powerful tool, but you do not need to go abroad.

Comparisons can come from visiting our peers, both within and across disciplines. We can at the staff level, get people to shadow their peers in different departments, and the insights that can bring to the effectiveness and efficiency and the way that people work together could be quite transformative.

So every time I meet other health regulators or regulators of any occupation, I always learn something new. It stimulates my thoughts, it helps me move forward. So entering into the dialogue with other disciplines can take us out of our comfort zone, it can stretch our thinking and enable us to make more rapid progress. So let me elaborate on this further by looking at evidence.
So this will be published in the October edition of the Journal, but this is data from the Web of Science. It's an analysis of the themes identified from the content of material indexed since 1900, on the topics of occupational licensing and professional regulation.

Now, when you look at all of the information, there are in fact, five disciplines that come up with a quantum of material: nursing, law, economics, education, and medicine. By extracting the thematic clusters of content we can see who is interested in what and who is contributing the most to the evidential base.

Now, you'll notice from this slide that medicine does not have a list of themes. Medicine has covered a broad range of topics, but there isn't a consolidated evidence base that's been generated there. By looking at the entire literature, we can ask questions about what we as a discipline, have not focused upon.

What are the opportunities? By looking at the various disciplines, we can identify potential experts that we may wish to talk to, to collaborate with. Working in isolation restricts our potential to make true progress. But we must look deeper. This is not sufficient, just getting an idea about the topics. We also need to look at the quality of the evidence that is being produced.

Now, we know that using evidence is important, and that increasingly, research-based evidence comes at us almost on a daily basis. It comes in the form mainly of articles and reviews. That is the scientific content that we see.

So in developing the discussion with our legislators, with our stakeholders, we need to curate that information. And if we look at the same information that you see on the screen, by compacting both the articles and the reviews, we identify that of all of the literature there, 74.2% of it is evidence-based.

But as you can see, nursing, the law, and economists are the ones that are actually leading the production of evidence in relation to occupational licensing and in relation, too. So we actually have something that we should be proud of, that we should promote, and that we should use, because opinion is important, but evidence is far more important.

So the strength of disciplines and indeed the weakness of disciplines is often the fact that we publish in our own journals. Nurse regulators publish in nurse regulatory journals. But we've got to build upon that, we've got to take our expertise, we've got to take bold steps, we've got to start publishing in the wider journals, in the economics journals, the law journals, so that our message is distributed more widely and we have a greater input.

So therefore, as nurse regulators, we actually need to get out of our comfort zone, we need to invite others in to write in our journals as well and media, on the editorial board have been doing a great job of that of getting economists and lawyers to write in our journal. But we've actually got to take that next bold step.
If we want to be effective, if we want others to carry our message, then it needs to appear in their comfort zone, not just in ours. So with unprecedented change and increasing capacity, the use of evidence will need to be more responsive to the ecosystem.

We need to take opportunities when they arise. We need to create a hurricane of reform by flapping our wings. And to do this, we need uninhibited curiosity. I always wondered when my children were very young, they'd never stop asking the question why, and how, and where, and all of these questions.

But those questions drive us forward and we need to be curious. We need to ask the question, can we do this better? We must embrace if we are going to generate new solutions. But these questions will give us foresight, because it's not just about dealing with the here and now, it's about knowing what's coming towards us and have those solutions in place.

Seeing the challenge ahead enables us to prepare for them, change direction, or use the challenge to our advantage, but to use them to our advantage, we need to take risks. We need to be prepared to be responsibly subversive. We need to challenge the status quo and remember that stopping something that we have done forever is often the most difficult choice, but it's often the most likely to liberate our capacity for change.

So while evidence is important, stories are critical. Framing our message in terms that people understand and can relate to is far more effective than P values. Remember 2.5 exabytes of data per day, or the equivalent of 90 years worth of high definition video, or quarter of a million libraries of Congress, explaining it in those terms people can understand, we need to be able to tell our story.

So as we move forward, we need to do so with proportionate to caution. Not every public safety challenge requires a licensure response. Reformed regulation needs to be fit for purpose, and not unnecessarily, excessively restrictive. We should lead this debate rather than respond to the edicts of others. Self reflection is important in clinical practice, and it is important for us as regulators.

Now, none of us entered nursing to become rich. Many of us did so because we wanted to make a difference. Those of us that stay in the profession enjoy what we do. We need to celebrate our successes and we need to learn from our failures. But importantly, pursuing the challenge with passion is how we will encourage others to take an interest in the work that we do.

Now, Julie will provide detailed information on the changes being proposed to our strategic initiatives. But in closing, let me frame it like this: We have demonstrated we are acting in the public interest. With agility of response to the challenges ahead, we can do so much more. Regulators set standards, they license nurses, they exercise discipline, but we do this for a much greater purpose.

We do this to save lives, facilitate health and well-being, and to keep the profession aligned with the needs of society. By taking bold steps, we will achieve results together. So before we go to lunch, let me leave you with the words of Carol Burnett and give you my reflections on her wisdom.

Over the next three days, let's learn from each other, share views, and open our minds to the possibilities of what we can do together. That is how we will build on the 41 years of success to another decade of great achievement. Thank you very much for listening to my presentation.