2017 NCSBN Annual Meeting - Mercy Virtual Nursing: An Innovative Care Delivery Model Video Transcript
©2017 National Council of State Boards of Nursing, Inc.

Event
2017 NCSBN Annual Meeting

More info: https://www.ncsbn.org/9917.htm

Presenter
Laurie Haworth, MSN, RN, CCRN-E, Sr. Clinical Operations Specialist, Mercy Virtual, St. Louis, MO

Liz Klingensmith, MSN-Ed, RN-BC, NEA-BC, NE-BC, Vice President of Nursing, Mercy Hospital, Ada, OK

- [Laurie] Well, good morning. I am just so thrilled and honored to be here with Liz today and talk to you a little bit about telehealth nursing and our take on it at Mercy Virtual in St. Louis Missouri. So according to your own organization, telehealth is the remote delivery of health care services and clinical information using telecommunication technology. This includes a wide array of clinical services using the internet, wireless, satellite, and telephone, and video media. Today, Liz and I are going to talk just a little bit. There we go, talk just a little bit about the actual conceptualization and evolution of telehealth at Mercy Virtual, and then as you see, examine some of the impact, the benefits, the challenges, relate how telehealth nursing can impact patient care and patient outcomes. And then analyze some of the implications here for nursing regulators in creating some of the standards of practice, standards of care that lead and direct virtual nursing practice. So telehealth has been around for a long time. Much longer than we probably even imagine. The advent of the telephone brought the first concept of telehealth in 1879 Lancet, the British Medical Journal, discussed using the telephone to reduce unnecessary office visits. So quite some time ago. And in 1925, science and innovation magazine showed on the cover a doctor diagnosing a patient by radio. And in their article, envisioned doing patient assessment over video...and that was in 1925. I didn't know even video existed then. But fast-forward, 50 years to a model that was actually designed by NASA and Lockheed Martin as a part of maybe testing their own space technology but also providing some vital care to the Papago Native American tribe in southwest Arizona. That project was called Starpack, very well documented the success of that program and it truly is the model that we use today with a remote hub of...with health practitioners and then someone at a location closer to where the patient lives who can assist with assessment and discussion of patient care. So that brings us to Mercy Virtual in St. Louis Missouri. And in 2004, we began exploring how to provide 24/7 care to all of our facilities in a four-state region that did not have critical care intensivists around the clock. And as the medical director who's still the medical director today started touring around the country and looking at tele-ICU models in different healthcare organizations. He and his team realized the benefits of enhanced provider staffing. And since that time, they also have discovered that we can be of great help with quality monitoring as well as nurse resource and support. So let's take
just a moment to see what Mercy Virtual is all about. It's a bit of a promotional video, I apologize for that. But if our video personnel will roll the tape, we'll look a little bit about what we're about. - [Man 1]

Ten years ago, Mercy made a promise to get health care right. We reached out to Epic to create our state-of-the-art EHR. We invited our physicians to become innovators. And we began working towards the goal of a new care model with compassion at its core. With almost a decade running one of the world's largest tele-ICUs, we introduced the world's first virtual care center. It's powered by exceptional caregivers, proprietary algorithms, and Epic's ability to deliver patient data in real-time. Our products and services are designed with feedback from health systems from around the country, including our own. They fill common gaps in the care continuum and the results speak for themselves. - [Woman 1]

Your doctor should be in in just a minute. We're going to get ahead of that pain. - In 2016 alone, patients admitted to our tele-ICU program had 35% lower mortality and 35% fewer days in the hospital. This eliminated more than 40,000 ICU days and even more in other units. Costs were reduced by millions of dollars. But most importantly, almost 1,000 men and women went home who weren't expected to. - [Woman 2]

We've run the sepsis protocol and there are some red flags. - Mercy's tele-hospital is programmed. Responds to calls in less than a minute and usually resolves issues in less than 10. Virtual support removes bottlenecks and keeps care plans moving forward. With implementation, hospitals enjoy reduced labor cost, physicians experience less turnover, and patients get home faster. - [Woman 3] And when did the baby's fever begin? - Another success story is our comprehensive care management program. Working closely with Epic, our team of highly experienced nurses use customized applications to care for patients with chronic conditions. Representative clients have enjoyed strong results with 22% fewer sick days, a 20% reduction in medical spend, and a 15% drop in hospital admissions. The program quickly improves patient health and quickly reduces health care costs. - [Man 2] It looks like your blood pressure is a little bit high right now. So let's talk about how you're feeling. - In the U.S., almost 50% of health care dollars is invested in only 5% of the population. A new care model must better respond to the seriously ill and prevent unnecessary hospitalizations. To address this need, Mercy Virtual created the innovative Engagement@Home program. This highly personalized approach bridges gaps in the care continuum. Working directly with patients, navigators reduced costs by an impressive 30% and cut hospital admissions by half. By consistent management of complex conditions, this program gives patients more autonomy and minimizes disruption in their daily lives. Data drives innovation and it also drives us. Our portfolio of services drops septic shock deaths by 60%, reduces false positive alerts for bedside nurses by 90%, and earns patient satisfaction scores of 98%. We're partnering with communities, employers, and health care systems across the country ready to build a new model of care and get health care right. Ready to join us? Learn more at mercyvirtual/ready. - So that's a little bit about us. We moved into our new building two years ago and telehealth is exploding there. We actually are now beginning to occupy a second building. So a lot of growth. And one of our goals is care across the continuum. And you definitely saw that in the video. It all started with tele-ICU. In 1998, two physicians from Johns Hopkins University founded Visicu. And they patented their eICU data collection and physiologic trending software through a centralized eICU. They likened it to an air traffic control center for health care. So they had a hub that had nurses, nurse practitioners, and physicians who monitored patients 24/7 looking at trends, looking at real-time data, and having the ability to investigate the chart, the x-rays, labs, that sort of thing. Their goal with Visicu was to enable health care systems to standardize ICU care across multiple hospitals and leverage scarce intensivist resources. In 2008, Philips Healthcare, one of the largest medical manufacturers in the world, purchased Visicu and market now their eICU product to over 400 hospitals throughout the world. It's now expanding to emergency departments, med-surg units...because you know I already said emergency departments, home health care, and skilled nursing facilities. They tout on their websites and statistically significant outcomes in a...
five-year study that examined the impact of a new ICU program throughout 56 ICUs in 32 different hospitals. Studying over 120,000 patients, they did find a very significant difference as in the reducing both length of stay and mortality. With that, lives saved is also dollars saved which is so precious to our health care industry today. They demonstrated a $2,700 per patient per ICU stay. So that's quite significant. So what do we do in the tele-ICU for those of you who may not be familiar? You saw some of the screens we look at. We have six screens we look at. So it's sort of is cockpit-ish or really a true IT techie type experience. But basically, we are there to provide that second layer of protection for the bedside staff. We can look at real-time data, we can look at trending. We have a trending screen for each patient that shows...pulls in all the data about the patient and their patient during their stay of what's going on. And so if we see a trend in a negative direction, we are actually able to investigate further and see if we need to help intervene. Nurses also, sometimes the resource of a second nurse is invaluable. So we sometimes are able just to do a little research, read a little more in the chart about the patient or look up a disease condition that is very unfamiliar to that nurse or to anyone. We also can do second signature for blood products or medication administration. We can tunnel into the EHR, our cameras are a high-enough definition that we are able to read the patient's ID band, we're able to look at IV bags, we're able to even look at the patient's skin or their wounds. So we can do some documentation with the nurse. We can document some of those IVs as he or she is looking at them. We can zoom in, they can position the patient so we can see them as well and we can document. So we do that sort of thing. The resource component is very vital. In our unit at any given time, we staff with about 12 to 14 nurses now per shift. We may have a nurse that was a hardcore trauma nurse or neuro nurse or they may have experience in balloon pumps or ECMO. So one nurse at a bedside may be a hundred miles away from us in a remote area of Missouri has access to all these nurses and they're experienced. Our nurses typically have at least 19 years of experience. The average is around that, 15 to 19 years of experience and they come from a variety of backgrounds. So that's a great support for nurses who may have limited experience or limited exposure to certain things. We also provide quality monitoring. So in this world where quality is key and we are meeting things such as vent bundles or sepsis bundles, assuring that patients have DVT prophylaxis, we actually can help do that chart review and alert the nurse to patients that do need extra things added to their care. So out of tele-ICU, came TeleSepsis. So patients who experience severe sepsis or septic shock often wind up in the ICU rightfully so. Several years ago, we determined that we wanted to not just monitor ICU patients for pending sepsis but also all patients who enter the system. So we worked with Epic and our own IT programmers to create a software that when a patient is first entered into the electronic health record, no matter where they are, if they are showing signs of SIRS, systemic inflammatory response, that we can identify that quickly via software, enter the patient into a special virtual unit called the virtual sepsis unit, and then further monitor them. Philips software actually can identify sepsis or SIRS and then the nurse actually with her experience and skill set can dive deeper and see if it's truly a surge from sepsis, or is it from something else like trauma, or maybe they just experienced a major surgery, that sort of thing. So SIRS can happen in a variety of ways. So with that, our nurses actually have been found to be 98% accurate in identifying severe sepsis or septic shock. And they have the ability to actually activate a rapid response for that patient so that the patient gets the care they need wherever they are. With that program in place, the last probably six years that it's been in place, we have noticed a drop in mortality from severe sepsis or septic shock by 15% to 20%. So we're really excited about that. And it's a skill that the nurses love. They just love being sepsis nurses because it's...you get to use your investigative skills. Finally, I'm going to present Engagement@Home. Engagement@Home, you saw on the video that it is our...it's actually our newest product. It's been in existence two years. It is the program designed for the sickest of the sick at home. So as the video alluded to, 100 million Americans with chronic disease account for about 75% of our
health care dollars. With over 350 billion people in the United States, only 100 million using up all of that healthcare expenditure and resources is a bit concerning for all of us. So we’re changing the care model from an episodic office-based care model to a continuous care managed model. Paramount to our program is collaboration. So we have a team consisting of a nurse navigator who is actually unlicensed personnel who has a lot of contact with the patient helping them get set up with their iPads, that sort of thing, an RN advanced care practitioner such as a nurse practitioner or a PA, and then a physician. That same care team sees the patient always. So unless one of the care team leaves which we don't have a lot of attrition rate, but that is vital to the program is that collaboration and that relationship building with the patient. Our average age of our patient in that program is 74 with 27 diagnoses and 16 medications. They're already enrolled in some type of care management program when they come to us. We currently see over 600 patients in 5 states and we're growing. We get demands for this every single day. Since we started the program two years ago, as the video alluded to, we have a 50% reduction in readmissions, ED visits, and new admissions to the hospital. We also see a 98% satisfaction rate with patients. And I'd like to point out that most surveys, you only get about a 20% response rate from the people that you survey. In our program, we get a 94% completion rate. We do use the HCAP model of scoring for satisfaction and we survey at 60, 120, and 180 days. The key to this also is the daily asynchronous video. Video us our daily asynchronous visit. It may be by video, it may be just the transmission of vital signs, and maybe the patient watching a video. They're very engaged in their care. It's currently showing a 30% cost reduction in savings. We do not charge for this program currently. We are seeing patients within the Mercy Health System and the benefits to this is improved patient outcomes as well as a reduction in cost savings. As they look towards the future, the leaders of this program are really looking at a full risk model and engaging with healthcare payers to take on that whole risk of the patient population and they recognize the benefits in the outcomes of the patients and the health care savings. Mary Ellen is a nurse practitioner who has been with the program since its inception and she expressed some concerns about leaving a primary care practice that she was involved in and not having patient contact. But what she has actually found is that she actually has more patient contact by doing Engagement@Home. Her quote impacted me. She says, "When I first hired on, I was told to think outside the box. This is not traditional primary care hospital or emergency department approach, it's totally different. It's exciting to be a part of patients' lives, those who see a change and an opportunity to get help early on. It's sort of a new frontier. There's so much opportunity for growth." And I really do think this is what we're going to see in the future. A lot of growth in this type of care. So I'm really excited about it for not only our patients that we serve but for my family, for maybe me in the future as well. So the final aspect is TeleStroke Care. And I'm going to turn it over to Liz so she can share a little bit about TeleStroke as well as the impact on the bedside nurse. - [Liz] Thank you, Laurie. My colleague has discussed in detail the terminology, technology, and capabilities of virtual care delivery. I would like to explore the role of the bedside nurse in virtual care delivery, the impact on the nursing profession, and discuss the implications for nursing regulators. As nurses adapt to incorporate new technologies and evidence-based care, the fundamentals of the nurse-patient relationship must be translated into those new models of care. We've made health care very complex environments. The bedside nurses of today rely on teamwork and technology to accomplish nursing care. Rather than being overly technical today, I'm going to utilize the term red button. During shift handoff, the red button is pushed and the virtual nurse is immediately activated. The bedside nursing handoff is a complex event involving exchange of critical information. And this is also a point at which critical data can be lost or missed. So having the virtual nurse as an active participant during nursing handoff strengthens the data handoff, and provides support as handoff is being given. Laboratory data, vital signs, and assessments are reviewed for trending and questions are asked and answered. Another application of virtual interaction is TeleStroke.
Our TeleStroke program supports over 30 hospitals across Missouri, Arkansas, Oklahoma, and Kansas. Two-thirds of these hospitals are critical access facilities with bed capacities of 25 to 50 beds. We serve as a mentor, facilitator, educator, and team member as stroke assessment and interventions are provided. We facilitate on-demand stroke assessment and treatment that's supported by board-certified neurologists with a stroke focus which enables rapid intervention that's focused on IV-tPA administration within that two to three and a half hour window...excuse me, that three to four and a half hour window that's currently recommended. We also provide recommendations for interventional therapy should that be necessary. The service is available 24 hours a day, 7 days a week, 365 days a year and our response time is typically within 15 minutes. In the hospital's pre-implementation of TeleStroke, there was a 0% utilization of tPA administration. But post implementation, we’ve seen an increase in 10% to 15% in the utilization of tPA which has absolutely saved lives. And this is in part because our neurologists can interact from wherever they are via two-way high definition video. This provides access to neuro specialty service lines and small to medium hospitals where outpatient, inpatient, and emergency stroke services would be unsustainable. It keeps patients in their own community by referring and transferring only when necessary. And it also promotes a local stroke program that supports community education for stroke prevention. As you can see, there are many benefits of virtual care on the nursing profession. One such benefit is data synthesis. Data synthesis is the complex trending of data that occurs at a rate at which a human would have difficulty replicating. This data extrapolation and computerized interpretation provides opportunity to advance nursing knowledge and improve upon early recognition and intervention. The key opportunity for the virtual care team is early...is leveraging this technology to recognize early deterioration such as a trajectory toward sepsis and then providing prompt intervention to save lives. By extrapolating significant patient data points, we can improve the overall quality of care through a focused individualized approach which results in decreased morbidity and mortality, decreased length of stay in the ICU, and decreasing readmissions. Across our country, we're experiencing a shortage of nurses. As our patients are living longer, they're also presenting with more comorbidities and a higher acuity. This is coupled with the movement of more novice nurses into specialty care areas such as the intensive care unit. And this is to compensate for those experienced baby boomers and veterans who are retiring as the manual labor and the 12-hour shift becomes too strenuous. This nursing care delivery model supports these novice nurses by providing constant support and mentorship. Imagine back to your novice time frame where you mostly knew what you were doing but you didn't always understand the rationale for why you were doing it. The reinforcement from the virtual nurse provides confidence and increased quality of care is delivered as knowledge sharing occurs. When you're unsure about an assessment, the red button is activated and the virtual nurse presents ready to support in whatever capacity is needed. It relieves the hesitation that results from the decision to wake a sleeping provider or to delay a care decision. Another benefit of virtual care is validation opportunities. Have you ever spent time searching for a free colleague so they could second signature high-risk medication or validate blood verification? I'm sure we all have. In our virtual environment, the red button is activated and the virtual nurse presents and the process is completed without ever having to leave the bedside to search patient rooms for a free colleague to assist. Some other examples of validation opportunities are code blue documentation, monitoring my patient while I'm briefly off the unit, and notification of an intensivist, when you need that intensivist at the bedside immediately but you're hesitant to leave that patient's bedside. With new technology and a new language to learn, a managed process of change to create the habit of utilizing the telehealth team and equipment is essential. The synergy between the virtual nurse and the bedside nurse complements the interpersonal relationship between the patient and the care team which promotes therapeutic health outcomes. So the importance of communicating the rationale for utilizing the integrated telehealth model
is of utmost importance. When the bedside nurses understand what partnering with telehealth can do for
their patient, the transition becomes easier. They build a rapport through a series of positive interactions
with the telehealth team. Addressing any misconceptions is also incredibly important. Our model is a
comprehensive integrated care delivery model designed to marry evidence-based medicine with
technology in order to decrease morbidity and mortality for patients. What it is not is a standalone model
meant to replace nurses at the bedside. As virtual care is an innovative care delivery model that requires
nurses to rethink traditional bedside nursing and as nursing regulators, it is paramount to stay abreast of
the practice environments in which our nurses are delivering nursing care. My colleague outlined
multiple applications of virtually provided care. And this care delivery model requires nurses from
different states to function within a single team. While the nurse licensure compact will alleviate some
of these concerns, virtual care brings expertise from multiple states to the bedside of a single patient.
Nursing regulators should be cognizant of the practice implications in order to formulate position
statements, policies, and direct nursing care. I'll pass the presentation to Laurie and she'll further discuss
the implications for nursing regulators as well as some considerations for licensure across the states.
And my apologies to Liz. I was the slide person and I forgot to advance there. So I apologize for that. So
as Liz alluded to, assuring safe appropriate care as well as consistent care especially when your patients
and your nurses are in different locales and multiple locales is paramount to what we do. And as I
prepared for this presentation and reviewed your business book and looked at some of your position
papers, I was, again, quite impressed with the work that you've done. Before nurse licensure compact
individual state requirements, even now, individual state requirements vary and duplicate in many
instances. And our nurses, since we currently practice in seven different states, may have at least three
different types of pre-licensure education, three different types of continuing education that may need to
be done annually or biannually as well as that background checks and fingerprinting that are done. Some
of our nurses have horror stories about fingerprinting because they may be denied the first time and so
it's multiple trips to the police department which can be a little intimidating in itself. We also have
several hospitals' specific considerations, policies and procedures, different electronic health records,
and annual competencies that must be met. So our nurses do get a lot of education and are involved in a
lot of reviewing of policies, procedures, and assuring that their annual things are met for licensure as
well as for practicing in a hospital. When we first started, nurses were responsible for that themselves.
And that can be quite the challenge, juggling, trying to get all of the paperwork completed in timely
fashions as well as annual expectations. Now, because we are growing and we have such a large
workforce, we have an entire licensure and credentialing department that are able to keep us on
 task and able to help us with some of that paperwork. They know a lot about us because they have all of our
background, all of our demographics. So they're of great help. Also, our nurses are all...at least our tele-
ICU nurses are all CCRN certified. So they also are involved in education with that and assuring that
they're up to date. As I wrap up my portion of this presentation, I again alluded to the the work that
you've done as a council to really look at telehealth. And one of the phrases that I'm going to keep with
me now is your reference to borderless health care. I love that statement and I think that's what we're all
about at Mercy Virtual, is borderless health care and continuing to see that the needs of the patient are
met wherever they are. Two thoughts from your business book that I really...impacted me and I really
would like to share again, just reiterate what you've written. As we continue on this journey of
borderless health care, policymakers, stakeholders, and practitioners as a team must strive to implement
creative solutions for all individuals regardless of locale. And it will be essential for nurses to
collaborate, to uphold high standards and generate regulations that lead, I like the word "lead," the
activities rather than follow them. So I often like to say that here at Mercy Virtual, we are grabbing on to
the tail of a comet and I think that probably in relation to the National Council of State Boards of
Nursing, you also are in front of that comet leading the way. So I thank you so much. I'd like to turn it over to Liz for her final thoughts and just thank you all for letting us have the opportunity to share a little bit about telehealth nursing at Mercy Virtual. - In closing, virtual presence when utilized in conjunction with traditional bedside nursing has the potential to innovate a new system of delivering nursing care across the world while maintaining the compassionate and therapeutic relationship between nurses and patients that enhance the health care experience. Thank you for your time and attention today. Do we have time for questions? Okay. Laurie, would you like to join me? - Questions from anyone? All right, number four. - Okay. Mic number four. - [Diane] My name is Diane Mancino. I'm the Executive Director of the National Student Nurses Association. Really enjoyed your presentation. It's so nice to know that the future is here or at least it's starting. But I do have a question mainly about how it's funded. I know there's a lot of cost savings. Are you taking those cost savings and putting it into technology? You know, we all know that technology is a great investment but platforms of the equipment, hardware, and the software are constantly changing. How do you fund that? Thank you. - Laurie, if you'd like to answer from the virtual care side, then I can add the piece for individual hospitals. - So it is quite the financial commitment obviously to be involved in tele-ICU care, TeleSepsis, TeleStroke, all of that. The cost of the equipment is a cost that is solely on the hospital or the organization that does it. The tele-ICU staff, obviously, the virtual care center is committed to that. Mercy Virtual has been just such visionaries in my opinion because they have absorbed a lot of cost for several years until they hopefully sort of got it right if you will. And when that happened, they did begin even in their own hospitals, and Liz can attest to that, started charging for the care and annual fee of the care of tele-ICU services. Currently for Engagement@Home, as I mentioned there is no cost to the patient. We do not do fee-for-service. But looking towards the future, the way that we are hoping to fund our program is by using a full risk model and the state cost savings of that money will continue to improve their technology. And we do continually look at... Our virtual care center is two years old. So when we moved to the virtual care center, we made a huge investment on equipment in the center and we continually look at ways that we can improve our programs so that not only are we providing state-of-the-art care but we also are very secure in the way we do it because security is of utmost importance to the hospitals that we bring on from, you know, from many years back forward. - And I would add to that, as a single hospital perspective within our ministry, as the virtual care center really is a hospital without beds and they don't have a source of revenue coming in, so our corporation president, he felt very strongly that this is an avenue that we should explore and we should pioneer within Mercy. And so we did develop a cost structure where there would be shared services fees shared between the hospitals that enjoy having the support of virtual care. But the other thing that I think is a driving force for Mercy because we don't charge our patients for it yet, we feel like as payer sources and then federal regulations continue to explore virtual health care delivery, that programs will continue to evolve that will help to support and provide reimbursement for these types of services so that we know we can provide high quality efficient care that is as responsible to the economy as it is to establish medical and nursing standards. I hope that answered your question. I think we have a question at...oh, number one? Okay. - [Meddie] Good afternoon. My name is Meddie Bardonille and I'm a board member from the District of Columbia. I have two questions for you. The first one is, what impact does telehealth have on health care and malpractice as relates in this diagnoses or treatment? Then the second question I have is, has there been any consideration for specific nursing certifications in telehealth or virtual health? - A great question. Thank you. - And actually, I did not share this study with you just in the interest of time but had it in my notes. If I can find it. I might not have actually even saved it in my notes, but let me just share with you that Philips actually on their website shares that one study demonstrated a 90% reduction in malpractice claims in hospitals that enlisted tele-ICU care. That is just one study, but to me, it's very
The virtual care provides a supplementation to the nursing care that's delivered. So those nurses do not relinquish any of the responsibility they have, but rather, they have the supplement and maybe the safety net of talking with an experienced critical care nurse and saying, "I'm really concerned about this patient. I'm not really sure why but I feel that there's something wrong." And then the virtual nurse with her experience supplements what lack of experience maybe or just supplements the experience of another nurse. So you can see in that sense that it would actually help to reduce the malpractice. And then also when you consider that we wake physicians in the middle of the night and we ask them to make complex care decisions. But in this case, when we have our intensivists who are on-site, they can present immediately. However, we let them rest and we utilize the intensivists at the virtual care center so that they're awake and refreshed and ready to make those complex care decisions. So I would say that supports a decrease in malpractice. And I'm sorry, the second question? - Sorry. The second part of that question was, has there been any considerations for specific certifications in telehealth and virtual health as relates to nursing education because you can have a CCRN or a CEN or etc., but there's a lot extra that that nurse is going to need to be privy to as relates to telehealth. - Well, currently the American Association of Critical-Care Nurses has a CCRNE for electronic. And so the initial exam is identical to a critical-care registered nurse exam. However, ongoing, there are certain credits that need to be acquired that relate to electronic care. They have basically the same knowledge base. Also our competencies annually at our center are geared towards not only critical care knowledge and experience and exposure but also some aspects of telecare.

- And I would add that the AONE has guiding principles for the future of nursing care delivery. And so that really provides a good framework for nurses who work in a virtual environment. And I would also say that your question would be a really great one for the ANCC as well. Six. - [Charity] Yes. Hi, my name is Charity Cooper. I'm a nurse midwife and I serve on the Illinois Board of Nursing. I was wondering...first of all, I'm blown out of the water by this. I think it is absolutely fabulous. But as I've learned that nothing is perfect, what would you say has been your biggest challenge with this model? - I would say the challenges probably come from different directions. And I can speak to the individual hospital and then I'll ask Laurie to speak to the overall virtual care delivery. So within the single hospital, when you're implementing a program such as this, it's as mind-blowing to the bedside nurses as it is to some of you here today. So we absolutely have to address on the front end any misconceptions. And even with our surgeons, initially, some surgeons were afraid that it would reduce the services or the need that the hospital would have for them. And we had to remind them that no one could perform surgery through a camera. And so their presence was absolutely needed ongoing. As well as the bedside nurses understanding this isn't Big Brother watching you, this is having someone with really wonderful experience and resources. And when you include that data synthesis piece, they're going to recognize that your patient is getting sicker long before you do. So it's really about selling to them the benefits on their profession and what it can do for their patient that really helps to alleviate some of those concerns. And then I would say too it was about you're wiring all of the ICU rooms that you have or all of the med-surg rooms that you have with some really high definition video cameras. And so it takes also a lot of community education because the community has to understand that they're not laying in a bed and we have someone in another state just gawking at them. And so that was also something I think to work through but our patients now and the way that it was marketed to our community is that we're not
charging any additional fees for the service but this is Mercy's way of living out our mission in providing this additional level of care and protection to them. And we find that the family members that we serve, their comments have really centered around, "I feel like I can go home and sleep tonight because I know that my family member is being watched. And if this nurse needs a break, there..." excuse me, "There are always eyes on the patient," and I think that's been a wonderful benefit of the program. - And I echo what Liz said regarding adoption and acceptance of the program on both parts on the tele-ICU and especially the ICU nurses and other types of nurses that may be involved in telehealth care. I also will just share that our latest challenge is staffing. We cannot get enough nurses to be tele-ICU or TeleStroke nurses. Engagement@Home, I think we have quite a great surge of people who are very interested in it. But what we are doing at Mercy Virtual is reaching out and looking beyond our own borders and looking at places within the country that have maybe not an oversupply of nurses because I don't think that exists today, but an area of concentration where nurses who have that critical care knowledge, who are willing to work in a tele-ICU environment. So that's one of our big pushes and I think in the next year, we'll see two or three hubs throughout the country that are associated with Mercy Virtual and providing that care even more remotely than Missouri or the four-state region that Mercy is currently in. - [Man 3] So I just want to share one thought. It was very important. As we went through this, I was thinking, "Tomorrow has already arrived. We're actually here today and we actually need to figure out what some of the real regulatory challenges are and work with our colleagues to move that agenda forward." Please join me in thanking Liz and Laurie for a fabulous presentation.