Joint Commission Center for Transforming Healthcare

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Cathy Barry-Ipema: Hello and welcome to the Joint Commission Center for Transforming Healthcare news conference regarding reducing the risk of wrong site surgery. Our speakers today are Dr. Mark Chassin, president of The Joint Commission and the Center for Transforming Healthcare; Dr. Mary Cooper, senior vice-president and chief quality officer for Lifespan Corporation in Providence, Rhode Island; Tom Feldman, CEO for the Center for Health Ambulatory Surgery Center in Peoria, Illinois; Andrew Hayek, president and chief executive officer for Surgical Care Affiliates, Orange, California; Lisa Lewis, vice-president and chief nursing officer for Holy Spirit Hospital in Camp Hill, Pennsylvania; Dr. Rudy Manthei, president and CEO, Seven Hills Surgery Center, Henderson, Nevada; and Richard Webster, vice-president, Perioperative Services, for Thomas Jefferson University Hospitals in Philadelphia, Pennsylvania. Please take a moment to visit the Center's website, to access the complete press kit that includes the news release, storyboards, biographies of our speakers today, and other useful background information. Now, it is my pleasure to introduce Dr. Mark Chassin.

Mark Chassin: Welcome and thank you for joining us today to talk about the Center for Transforming Healthcare's newest project aimed at reducing the risk of wrong site surgery. First, I would like to individually thank each of the five hospitals and three ambulatory surgery centers that volunteered to work with the Center to address wrong site surgery as a vital patient safety issue: AnMed Health in Anderson, South Carolina; Center for Health Ambulatory Surgery
Center in Peoria, Illinois; Holy Spirit Hospital in Camp Hill, Pennsylvania; La Veta Surgical Center in Orange, California; Lifespan Rhode Island Hospital in Providence, Rhode Island; Mt. Sinai Medical Center in New York City; Seven Hills Surgery Center in Henderson, Nevada; and the Thomas Jefferson University Hospitals in Philadelphia. Surgery or any procedure on the wrong side of the body or at the wrong location or even on the wrong patient should never occur. These adverse events are all preventable and The Joint Commission requires accredited hospitals, ambulatory care, and office based surgery facilities to use a standardized approach known as the “Universal Protocol,” to prevent this kind of event from happening. The Joint Commission has been at the forefront of the wrong site surgery problem for many years. We issued two *Sentinel Event Alerts* to help health care organizations avoid these problems and we've partnered with professional organizations, such as the American College of Surgeons, the American Academy of Orthopedic Surgeons, and many others to find ways to reduce the risk of wrong site surgery. Despite these efforts, the problem remains a significant one. In 2010, wrong site surgery was the third most common type of sentinel event reported to The Joint Commission. Surgeries on the wrong side of the body, the wrong site, or even the wrong patient continue to happen by some estimates at a national rate as high as 40 times every week.

Awareness about the problem has increased, but we clearly have to do more to get a lot closer to zero. That's why the Joint Commission's Center for Transforming Healthcare is releasing today a set of targeted solutions to reduce the risk of wrong site surgery. Like many health care organizations throughout the United States, the hospitals and surgery centers that collaborated with the Center on this project recognized that while wrong site surgery is an uncommon problem, all facilities and physicians who perform invasive procedures are at some degree of risk. The magnitude of the risk is often unknown. Health care facilities and physicians who ignore this fact, or rely on the absence of such events in the past as a guarantee of future safety, do so at their own peril. Unless an organization has taken a systematic approach to studying its own processes and determining its risk of wrong site surgery, it is literally flying
blind. The results of this project will give hospitals and surgery centers a road map for pinpointing and measuring their risks of wrong site surgery. It turns out that this is a much more complicated problem than it might seem to be at first. There isn't a simple way to prevent wrong site surgery; it takes a comprehensive approach. If you start from the very beginning of the process of performing a surgical procedure, the scheduling of the operation, then you get an idea of how complicated the issue is. This project found that in 39 percent of cases errors were introduced during the scheduling process that increased the risk of wrong site surgery. For example, incomplete or inaccurate information about the patient or exactly what operation was planned. The scheduling or booking process can generate errors because the person supplying crucial information is typically working in a surgeon's office, often not directly affiliated with the hospital or center where the surgery will take place. So, that person frequently has many different hospitals and surgery centers to work with. If those different facilities have different requirements for producing information at the time of scheduling, confusion can result and incomplete or inaccurate information may be too late. The eight hospitals and ambulatory surgery centers working with the Center on this project devoted months of effort in identifying and measuring all the places where errors can creep into the process and increase the risk of wrong site surgery, from scheduling to the arrival of the patient on the day of surgery to the preoperative preparation of the patient to the arrival of the patient in the operating room, all the way to the beginning of the operation. They found risks at all phases of these processes. From the incomplete or inaccurate information, I mentioned before, during scheduling, to missing documents at the time of preoperative preparation, to inconsistent or ineffective procedures for marking the surgical site, to key omissions in the crucial Time Out process just before surgery, which is the last chance to verify the identify and the correct procedure. Identifying the specific risks allowed the participating organizations to develop effective targeted interventions that sharply reduce those risks. For example, addressing documentation and verification issues in the preoperative holding areas decreased the percentage of cases with risks from a baseline of
52 percent to 19 percent and the incidence of cases containing more than one risk decreased by 72 percent. The focus on eliminating all risk is important, because a single case can have multiple opportunities for risk and where there are multiple risks in a single case, the risks of those errors reaching the patient increases. These targeted solutions for reducing the risk of wrong site surgery will continue to be tested at the participating hospitals and surgery centers and, later this year, the solutions will be pilot tested to prove their effectiveness at different types of hospitals, ambulatory surgery centers, and other care settings. By the fall of 2011, the Joint Commission's Center for Transforming Healthcare will have the data to demonstrate whether the risk reductions can be increased and sustained. Specifically, we'll be looking at whether organizations can achieve a 90 percent or greater rate of cases with no measured risks. The solutions will be added to our Targeted Solutions Tool™ later this summer. The Targeted Solutions Tool™ is an important way The Joint Commission makes the learnings developed by Center projects available to all the health care organizations we work with. It is an electronic application available to all accredited organizations at no added cost that they can use to develop customized solutions that address their own specific barriers to excellent performance. The tool helps us to spread the solutions to more than 19,000 health care organizations that are accredited or certified by The Joint Commission. There are already targeted solutions in the tool for improving hand hygiene, solutions for improving hand-off communications are in the works and expected to be added to the TST in late 2011 and more of the solutions are coming. In addition to wrong site surgery, the Center is aiming to reduce surgical site infection following colorectal surgery through a project launched last year in collaboration with the American College of Surgeons. The solutions for that project are targeted for release later this year or early in 2012 and a new project to prevent avoidable heart failure hospitalizations was launched earlier this year in collaboration with the American College of Physicians. With wrong site surgery, and with each of the problems addressed by the other Center projects, there is no silver bullet or quick fix, but the work of the Center is beginning to show that even these
complex problems that have resisted a solution for so long can be effectively addressed, and that we can transform health care for patients to much higher levels of safety and quality.

Mary Cooper: Thank you, everyone, for signing on to hear how we have been improving safe surgery in our operating rooms. Lifespan is a four hospital system based in Providence, Rhode Island, and affiliated with Brown University. And we reached out to the Joint Commission’s Center for Transforming Healthcare approximately three years ago after several very public wrong site surgeries in our operating rooms at Rhode Island Hospital, our tertiary academic medical center. We do 25,000 surgeries a year in our OR's in that hospital and approximately 100,000 procedures around the hospitals for the number of patients who we have discharged from the hospital and we had a series of wrong site surgeries where we had to investigate what was happening within the hospital. When the Center for Transforming Healthcare came in, they were able to ascertain that we needed to do three things: 1) We needed to improve our safety culture that we have at the hospital. 2) We needed to increase ownership of quality in our operating rooms so that the people who are at the frontline taking care of the patients in the operating rooms were looking for opportunities to improve care for those patients. 3) We needed to introduce highly reliable methods of improving that quality, and that was the most significant change for us. When the Center for Transforming Healthcare came in, they introduced the concept of "Robust Process Improvement" to the staff in our operating rooms and worked with us over the next 18 months to reduce the number of opportunities for improvement from over 300 down to fewer than 20. In that 18 month period, we were able to show not only the frontline staff, but the surgeons and the patients coming into the hospital that not only was safety our first priority, but that we were prepared to put a tremendous amount of resources into making safety our first priority. At the end of that 18 months, we shut down our operating rooms for a day in order to teach everyone our new protocol for arriving at safe surgery, and I'm pleased to say that it has been approximately 20 months since that occurred without, and I knock on wood every day, any wrong site surgeries in our OR's. So, I want to thank the folks from the Joint
Commission Center for Transforming Health Care, who came in and worked with us. I want to thank our staff who put a tremendous amount of time into learning a new method for improving quality and safety in our operating rooms.

Tom Feldman: Good morning. I am with the Center for Health Ambulatory Surgery Center in Peoria. We are a joint venture facility; one location. The joint venture is between St. Francis Medical Center and then four other investor physician led groups. We do approximately 7,000 cases per year, multi-specialty. We were approached by the Center to participate in the project about a year ago. We were very excited to participate as patient safety is our number one priority. It was a valuable experience in gaining insight in best practices from others. We were happy to share our own practices as well. We have already seen a reduction in some of the variations to our processes by taking this critical look. We think this will undoubtedly lead to better patient outcomes around the country. We appreciated the opportunity to participate and still recognize The Joint Commission and its recommended practices to be the standard by which all others are measured and I want to thank them for including us in this project. Thank you.

Andrew Hayek: We at Surgical Care Affiliates perform 500,000 surgeries and procedures each year at our 125 surgery centers and surgical hospitals of which La Veta is one. And our top priority at SCA is clinical quality and patient safety. We have made significant investments internally to improve processes and to improve care and we were very honored to be able to partner with The Joint Commission and this great team to invest in taking clinical quality, as it relates to wrong site surgery, to the next level. It was a great pleasure and honor and I do want to thank the team at La Veta on behalf of our 4,000 teammates, 2,000 physician partners, and 20 health system partners. It was a wonderful process and we look forward to continuing to support this important work. Thanks.
Rudy Manthei: Good morning. I am a practicing ophthalmologist in Henderson, Nevada; CEO of Seven Hills Surgery Center, which is a multi-specialty center, we perform approximately 5,000 to 6,000 cases a year. Surgery centers have become a high volume procedure facility that has emphasized multiple procedures that can be performed in a very short time period. For example, ophthalmology, pain management, and gastroenterology have always been a primary focus up to this point in time; however, now we must include orthopedics and other high volume specialty areas as well when we talk about high volume with rapid turnover times. This can require surgeons and staff moving rapidly from room to room without breaks. For example, ophthalmology, when I initially trained, a case would take two hours. At this point in time, certain ophthalmologists can do a case in five to ten minutes, so turnover can be very significant. At this high volume in turnover, it can turn a simple mistake into a significant problem affecting multiple patients. A prime example of this that affected our physicians is the occurrence of the GI cluster that occurred a couple years ago here that resulted in indication of Hepatitis C. Policies and procedures for wrong site surgery and infection control have to be followed to reduce the occurrence of these medical errors. Performance measures are necessary to document quality medical care as being delivered. Wrong site surgery is an excellent metric in which surgery centers can validate to the public that the highest quality of care is being provided. Use of meaningful metrics are part of the new health care legislation. Accountable care organizations build this concept into patient care to provide the highest quality of health care as it is affordable and provide greater access to health care as a result. The integrated care that occurs in accountable care organizations will allow surgery centers to access the patient's direct charts to confirm the procedure and eliminate errors from the majority of cases. The key to our center was the surgeon leadership and the staff engagement in the process. I look forward to answering your questions. Thank you.
Lisa Lewis:  Hello. I am with Holy Spirit Hospital in Camp Hill, Pennsylvania. Quality care will always be at the heart and soul of our mission here at Holy Spirit Hospital. We owe it to our patients to be the very best that we can be and to provide the safest possible environment for patient care. Our patients trust us with their very lives and they deserve nothing less from us. We are very proud of our excellent record of quality care and how we handle patient safety. We are also blessed to have never had a wrong site surgery at Holy Spirit Hospital. Holy Spirit Hospital is a mid-sized community hospital performing over 10,000 surgeries per year in our 15 operating rooms. We are the only hospital in the Central Pennsylvania region participating in this superb effort to make patients safer. We thank the Joint Commission's Center for Transforming Healthcare for the wonderful opportunity and we are honored to have been able to collaborate with other hospitals and health care facilities of this high caliber in working proactively to develop stronger processes and protocols to ensure we never, ever have a wrong site surgery. We joined the Center for Transforming Healthcare project because we wanted to put into place an evidence-based best practice that eliminates the possibility of having a wrong site surgery. This was a true collaborative effort. We learned a lot from each other about team communication, about strengthening our culture of safety. We are very pleased to know that our work may enhance the quality and safety of care of patients around the country. At Holy Spirit Hospital, we are committed to continue to focus on proven ways of improving the quality of clinical care we provide; our patients deserve it. And I want to thank you very much again for including us in this wonderful project.

Richard Webster:  Good afternoon. I am with Thomas Jefferson University Hospitals. We are a large academic medical center in Philadelphia, Pennsylvania. We have over 57 operating rooms across three hospital campuses, a level one trauma center, and we perform approximately 40,000 surgical procedures per year. So, we're a fairly busy active hospital when it comes to surgery. Being involved with this project with The Joint Commission and the Center for
Transforming Healthcare has been a great experience to really network and collaborate with other institutions to learn the challenges and opportunities that those institutions face and have implemented. Jefferson is committed to patient safety and continuously working to improve quality and patient outcomes. It's been a great experience. And, as Dr. Chassin mentioned, to look at the process from the very beginning to the point where we're actually doing surgery, has been very helpful in identifying opportunities for improvement. We look forward to fully implementing all the recommendations to further strengthen our process. I'd like to thank The Joint Commission and the other hospitals and surgical centers who we have participated in this project with.

**Reporter:** I just wanted to run down the list of solutions that, as I understand it, you're going to be testing each one of these solutions. Could you run down for me again which ones you think are the best, provide the best bang for the buck, as it were?

**Mark Chassin:** I'll take the first crack at that. The problem-solving methods that we use in all the Center's projects first focus on identifying exactly why the process isn't working and it's that pinpointing of exactly where the failures are that leads to the development of very focused interventions to get rid of the risks and problem areas that are uncovered. So, for example, in the surgical scheduling area, one of the problems that we encountered that explained errors creeping into the process is that there is the lack of a standardized way of collecting information that is essential to perfectly indentifying the patient and identifying exactly what procedure is planned. So, if that's a problem in a particular place, the solution to that is a carefully standardized way of collecting information that has several ways to identify the patient, not just by name, with spelling errors and little typos that can be a problem, and a way to specify exactly what the procedure is, what side of the body it will be performed on, exactly how it will be, so that the information can be conveyed down the line. So, that's one example. Another example in
the operating room, for instance, is if the surgical site is not marked close enough to where the incision will actually be made, when the patient is prepared for the operation and the surgical drapes are put in place, the mark may actually be covered up and not be visible. So, the specific procedure for how the surgical site is marked, to make sure that it's close enough where the incision will actually be made so that it's visible at the time of the last Time Out, is a critical intervention. But that's, again, a specific intervention that depends on exactly what the cause of the failure is. So, all of those interventions that are listed will not be required in every place. In fact, what we found is that these focused solutions are much easier to sustain because they're targeted at the causes that each individual organization has and, as you'll see if you look in the detail that we've provided, the distribution of causes differs from place to place, so not all of the same solutions will be required at every organization, and that's been a common finding in all of our Center projects so far.

Mary Cooper: I want to echo what Dr. Chassin's said about those two areas and, in fact, we aligned our receiving unit for charts and remodeled it so that we could emphasize preventing errors from coming downstream to the operating rooms themselves. The other area that we found to be extraordinarily helpful was at the Time Out itself. We stopped all other activities so that everyone could focus on that last opportunity to correct a mistake, to make sure that we didn't end up making an incision in the wrong place. Every single person in the operating room needs to stop what they're doing and we script the staff at that point to ask, "Can everyone see the mark?" And everyone has to respond. And so that was the other thing that we put into place that helped us tremendously.

Reporter: Yes, I think this would be for Dr. Chassin. Do you anticipate any changes in The Joint Commission standard for the Universal Protocol as a result of this project?
Mark Chassin: Thanks for that question. That's a really good question. What we found is that the principles that are embedded in the Universal Protocol are really universal. What the Center project uncovered is problems in applying the principles in exactly how to do the site markings, how to do the verification that precedes the patient's arrival in the operating room. And as Mary Cooper said, exactly how to do the Time Out. Turn the music off, get everybody's attention, everyone in the operating room has a role to play; the anesthesiologist, the circulating nurse, the surgeon, the assistant, and exactly specify what those roles are. And, as Mary said, even go so far as to script exactly what those processes are that they use in the operating room. So, we don't see, we haven't yet seen; although, as we pilot test this further and get more experience, it is certainly possible that we may want to refine the standards, but right now we don't see any reason for changing any of the components of the Universal Protocol. The principles work, but what we found is that individual organizations need to specify exactly how they'll be carried out.

Reporter: Hi. I just wanted to know if anyone had reaction to a lawmaker in Massachusetts who thinks that there should be video cameras installed in the operating rooms to, I guess, prevent wrong site surgery. I know that in Rhode Island you guys had to do that as part of the issues that happened a few years back. But I'm interested to (a) know how that was working in Rhode Island and (b) what is your reaction, if anyone wants to comment on that, on what Massachusetts is trying to do or may do?

Mary Cooper: We, in fact, did install video cameras in our operating rooms. They've been in place for approximately one year. We use those as improvement tools; that was the agreement with the State of Rhode Island when we installed them is that they would be used to record surgeons at least twice a year to look for ways that we could improve the process. We also were able to use them to audit different procedures because we rely on the staff policing, correcting, auditing, themselves and making sure that everybody in the room is complying with the scripts
that we have written for the staff to use during the Time Out process, but we have an audit process that uses the video cameras as well. We have found in using them that while we are using them, the staff has been very comfortable with the video cameras being in place, but we would not encourage them to be used, like they also have them in casinos where they're an eye in the sky and people are doing this as an extra set of eyes all the time. We think the performance opportunities that really rely on staff improving themselves is the long-term way to go.

**Mark Chassin:** I'll just add a comment to Mary's. First of all, the camera can't observe the entire process, right? Because we found problems in the surgical scheduling part of the process, in the part of the process where the patient arrives at the organization first thing in the morning for surgery the same day in the preoperative area, so there's a lot of the process that takes place prior to the patient's arrival in the operating room. Those parts of the process needed to be perfected as well as the last part of the process in the operating room. So, I don't think it is a necessary step. As Mary suggested, it can be helpful as individual organizations think that that kind of auditing or additional information could help them pinpoint problems, but I think eight organizations that have participated in this project have shown that we can identify areas where the risk of this problem is introduced into the surgical process and we can develop various perfected tools and interventions to directly reduce that risk without having to invest in huge numbers of video cameras.

**Reporter:** Hi. So, my question is out to any one of the participants in this process. In particular, I guess I'd like to get more of a really specific process, procedure that you uncovered that was not working and how did you apply, what did you do to fix that?
Mary Cooper: I can respond to that. One of the areas that we focused on was actually making the mark for the patients. And one of the outcomes that we had found in the past, when we made the mark, we had it separated into two parts in the holding area, the area before the patient comes into the actual operating room, and the operating room itself. And so, one of the things that we were able to find is that there was, at times there were discrepancies between what was seen in the holding area where the surgeon was not participating prior to our efforts and what the surgeon thought was being done in the operating room. So, we transformed our process with the help of the Center for Transforming Healthcare by having the surgeons all go out to the holding area to make the initial mark with the patient and the staff in the holding area and then subsequently affirm that mark by placing their finger on the mark that they had made out in the holding area and asking if everyone could see the mark. In order for that fix to be communicated to all of our surgeons, nurses, techs, anesthesiologists, etc., we shut down our OR's for a day, took them through both didactic and experiential training, and anyone who comes on staff, in our OR's since we did that almost two years ago, has been required to go through that same training.

Reporter: I'm sorry. You said that you shut down your OR to do this training; this is two years ago. What improvements have you seen since then?

Mary Cooper: So, we audit ourselves every day, every procedure, and we ascertain whether there is any deviation from the script or from the marking itself and, at this point, we have had a number of times that people deviate from the script or from the marking down to first to zero all the time, and since that time, since before that time, we have had not seen any wrong site surgeries.
Mark Chassin: I’ll add a couple of other very specific problems. A couple of places found, for example, that unapproved pens were being used to do the surgical site marking and that the mark actually was washed away during the preparation of the surgical site. So, making certain that only approved indelible pens were used; a simple, but nevertheless, important intervention, to get rid of that part of the problem. And there are a series of similar kinds of places where risks are introduced. I mentioned the percentage of cases in the preoperative area that had risks, went down from 52 percent across all the sites to 19 percent. The percentage of cases that had risks introduced in the operating room from all of the issues around Time Out, and marking, were at 59 percent before the interventions were introduced and went down to 29 percent. So, that was a drastic reduction in the risks and we expect that that will get even better as interventions mature over time.

Rudy Manthei: Just to give you an example of the impact, we identified in our operating room a most common defect was the site was not marked properly or consistently and identified that 88 percent of the site marking defects were in the pain management room, in which case, we changed the policy where the site marking requirement for pain management was moved to a holding area, which we essentially eliminated that problem. So, we were able to identify a significant risk factor, and created a solution for that.

Reporter: Yes. Thanks for doing this call. I guess this question was for everyone, but I’m curious what the process has been like for you and getting some of these solutions, training these solutions to your staff. We know, I mean, you all obviously know getting physicians to do Time Outs is a challenging thing. What's the process been like of getting some of the evidence-based and targeted practices in place and what have been the challenges?
**Rudy Manthei:** I'm actually an ophthalmologist, so I'm very familiar with physician behavior and you're right as far as physicians. They typically tend to be opinionated and one of the biggest problems that we've had, not just in this area, but in health care, is the fact that physicians tend to think that the way they do procedures are the way it needs to be done. But we find that if you educate the physicians, you spend time explaining the significance of the problem, the impact that it will have on patient outcomes, that they will embrace that and especially if you do one-to-one and you don't put them in a position to challenge their authority, they respond very openly to that. Once we find the physician that is buying into the system in the process, because it does tend to slow them down intensively, but it does create the leadership necessary for the staff, because staff wants to do the right thing. The staff always has the patient's best interest and, at times, essentially it requires the physician to be the leader and be onboard to do that.

**Reporter:** And what about outside of the clinical staff? So, I'm sure that schedulers may not understand the impact on safety on the OR in a surgical procedure, so what's the impact on educating them?

**Mary Cooper:** We took a slightly different approach. We did not segregate out the physicians or the schedulers or the nursing staff; everybody was in the project from the beginning, and was asked to participate in coming up with solutions to fix the problems that we had in our operating rooms. And that led to ownership of quality and safety at a much higher level than we had seen previously and frequently the solutions to any of the problems that we had arose out of all the folks who were working in the operating rooms. So, we actually did not run into a lot of dissent among any groups feeling that they did not have a piece of this, but instead really embraced it because of that ownership.
Mark Chassin: I would just add that this wrong site surgery problem is one of a group of problems that are uncommon, but are devastating when they occur. And they are so uncommon that an individual surgeon or even an individual hospital or surgery center may not have experienced one of these events in their recent past and may think that, therefore, they're not at risk of having one in the future. So, one of the things that we found that's very helpful, both in these kinds of events where we don't measure the success of interventions by counting the number of these events, they're too few for us to know whether we have effective interventions, so here we measure the risks of the event occurring. And it's the measurement that when it's brought to the physician, staff, or the clinical staff or the non-clinical staff, that starts to open eyes with quantitative assessments to point out that where you thought you might have had a safe process, it really may not be as safe as you thought. So, it's systematic attention to identifying the risks and then measuring their magnitude that is very helpful in getting everybody onboard with the improvement phase.

Reporter: Hi. Thanks so much for taking my question and thanks for this call. Dr. Chassin, I just wanted to know, before the Targeted Solutions for the Wrong Site Surgery Project are available in the Center's Targeted Solutions Tool™, what would you recommend the hospitals do or what should they do in the interim? Should they just use the list and then try to pinpoint their own problems related to wrong site surgery and use the solutions to tailor them or wait until the fall when they're able to put in their information in a more formal way?

Mark Chassin: So, that's a very good question. I don't think anybody needs to wait. I think that organizations where invasive procedures are performed are basically in two different groups. One is a group that's had one of these events and knows there's a problem and the other who hasn't had a recent one, but if they don't know what their risks are and they haven't measured them, then this is a very good way to get started. To recognize, first of all, that the process starts
with scheduling and this is one of the few efforts that's actually looked at the entire process of surgery from the scheduling to the time of incision, so I would encourage organizations, if they haven't standardized the way they collect information, to look at the specific problems that are on the Center's website now and identify the specific kinds of risks that are introduced in scheduling, the specific kinds of risks that are introduced by the failure to have the surgeon mark the site, to pay attention to the really critical details of how the mark is done, what kind of pen is used, how close it is to the incision, and then all of the specific problems that this project uncovered with how to do the Time Out, without full participation, without full attention and without all of the documentation that's necessary to verify the patient's identity, etc. All those details are in the materials that are available on the Center's website, so there's no need to wait for the Targeted Solutions Tool™. That will certainly be of major assistance, but there's no need to wait for it.

**Reporter:** Yes. I just wondered how much of a difference you saw between some of the larger facilities and the small ones as far as identifying the problems and the solutions.

**Mark Chassin:** I'll take a crack at that. We found the eight organizations that participated all identified risks in all parts of the process. This, as I said, turned out to be a much more complicated process than we had thought it was and that risks are introduced at every point. I don't think that there's anybody that can be comfortable unless they've gone through this kind of systematic approach to identifying specific risks and then focusing solutions on getting rid of them. I don't think whether you're small, medium, or large you can be comfortable that you've got a safe set of processes unless you examine them with the kind of attention to detail this project did.
**Reporter:** And, Mr. Feldman, can you detail for me some of the risks you were able to identify at the Center in Peoria?

**Tom Feldman:** I think maybe we'll get a chance to talk even further on it, but I think a couple of the points that we came up with were actually one the variation and the type of marks, whether or not a physician was using a dot or writing, "OK," or using their initials, writing the word, "Yes." So, there seemed to be some variation there. And then another one was the timing and the initiation of the Time Out. So, as an example, was the Time Out occurring before the prep and drape or after the prep and drape? And then another one would be the initiation and leading of the Time Out. Was it the circulating nurse who called for it? Was it the attending surgeon who called for it? And trying to close some of those gaps and decrease the type of variation, I think, helped everyone in terms of awareness in the OR room.

**Reporter:** Yes, I had one really quick question, and then a follow-up to another question. Is there a particular type of surgery that stood out as higher risk for wrong site surgery, either because of the volume of surgeries that are done or the complexity of the type of surgery?

**Mark Chassin:** Well, yes, but not necessarily in this project, but certainly from other work. We know that orthopedic surgical procedures, which almost always have either a laterality of side to choose from, or the case of spinal surgery, at which level in the spine the operation will occur. Those procedures are at higher risk. We also know that where more than one surgical procedure is scheduled at the same time, the second procedure or even the third, is at risk if the processes for guaranteeing the nature of the procedure and the patient's identity are not followed as rigorously as with the first one. Multiple procedures at the same time is another kind of circumstance where risk increases. And ophthalmological surgeries, there is always a side
issue there in both the anesthesia and the operation that need to be lateralized; those are types of procedures with higher risk.

**Reporter:** OK. Thanks. My follow-up question has to do with just refining the answer on the assessment of a hospital's risk, a hospital that has not had a wrong site surgery, to try to remind them or alert them they may have a higher risk than ever doing a procedure. So, could this be kind of like a checklist or processes that you might go through to see where this hospital falls in the spectrum of danger?

**Mark Chassin:** Well, when the Targeted Solutions Tool™ is available, what that will allow hospitals and surgery centers to do is to follow some very simple instructions. It's an electronic application available through every organization's secure electronic connection with The Joint Commission, to walk through what these participating hospitals and surgery centers did to measure their risk at the time of scheduling, in the pre-op area, and in the operating room. So, there will be very specific instructions for organizations to follow to measure whether they have risk and where it is. And that's what we certainly would encourage every hospital, surgery center and office that does surgical procedures to do in order to measure its risk and find out where it is so that they can get rid of it.

**Rudy Manthei:** Also, realize that with the new health care legislation for both hospitals and surgery centers, all this information is going to have to be reported to CMS. Quality indicators such as performance measurements/metrics and outcomes will be factors that will be directly tied into the way in which we are compensated for performing a procedure for a patient. All of these measurements will become crucial to the manner in which we benchmark ourselves in comparison to other health care systems in the U.S. This can ultimately affect how or if we are paid appropriately for procedures.
**Reporter:** Yes, that's really important. OK. Thank you very much.

**Reporter:** Yes. I just have one quick follow-up. As you look at some of the risks that you show on your storyboards, the ones that are outside of the OR that may impact some technology solutions, did you look at any of those, perhaps scheduling or anywhere else, where medical records and other things can come into play to assist in reducing the risk?

**Mary Cooper:** We are a HIMSS level six facility and certified for meaningful use, so we are actually very automated. Wrong site surgery can happen even in the face of automation and there are many solutions out there that are technology-based that can certainly help solve these problems and there is the introduction of technology in the OR that can distract people from what is fundamentally finally a cognitive decision, which is where to make the incision. And so I think that technology is neither a help nor a hindrance in this particular situation. I think that all of us have utilized technology in the OR to a great extent and, as I said, it can help us and sometimes it may get in the way.

**Mark Chassin:** I would just add, regarding technology, I totally agree with Mary. The place where technology helps the most is when you've identified a specific problem and then find the technology is able to get rid of that problem. So, for example, one of the problems in the preoperative area is that there were frequently missing documents. The history and physical might have been missing, the consent form might have been missing, so a technological solution to that could be at the time the patient's registering, if all those documents are not there and it's required to enter them into the arrival system, that the case just stops; it can't be moved forward. It's a hard stop until all those documents have been identified and are, in fact, with the
patient. So, it's, I think, most helpful in a circumstance where you've identified a risk and the technological solution helps get rid of the risk.

**Cathy Barry-Ipema:** If there are no further questions, we will conclude today's news conference. We will have a callback number posted on our website so people can callback and listen in and we will have a transcript posted within the next week or so. Again, thank you to everyone for your participation. To all of our speakers who joined us today, thank you so much. And to all of the reporters who have joined us, we thank you. If you do have any follow-up questions, please feel free to call Elizabeth Zhani or Bret Coons, and, again, check out our website, www.centerfortransforminghealthcare.org, which does offer a wealth of information. Again, thank you and have a good day.

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