Adolescent Idiopathic Scoliosis (AIS) Protocol Improves Length of Stay

In 2012, Adolescent Idiopathic Scoliosis (AIS) patients were automatically slotted for PICU beds on the first night post-op.

Due to PICU access, 22 AIS surgeries had to be rescheduled.

In alignment with hospital-wide lean six-sigma management strategies, an AIS project team was tasked with development of AIS to floor guidelines, resulting in a 15% improvement in length of stay, a 100% increase in patients served and a renewed joy for staff nurses empowered to transform the lives of AIS patients.

Join Bobbie Carter, RN, to learn more about the background, implementation, and outcomes for AIS patients at Children's Mercy Kansas City.

Featured Speaker:

Bobbie Carter, RN

Bobbie Carter, RN, MSN, CPN, is the Co-Department Director for the Orthopaedic Unit at Children's Mercy Kansas City. She received her associate's degree of Nursing in 2004 and then pursued a master's in Nursing Administration from the University of Mary, Bismark, ND. She has eleven years of nursing experience where her primary focus has been pediatric orthopaedics. She served as education coordinator for the Orthopaedic Unit for three years prior to becoming the co-department director.

Transcription:

Dr. Michael Smith (Host): Our topic today is "Adolescent Idiopathic Scoliosis Protocol". My guest is Bobbi Carter. Ms. Carter is the Co-Department Director for the Orthopedic Unit at Children's Mercy Kansas City. Ms. Carter, welcome to the show.

Ms. Bobbi Carter (Guest): Thanks for having me.

Dr. Smith: What exactly is the Adolescent Idiopathic Scoliosis Protocol? Why was it developed?

Ms. Carter: The Adolescent Idiopathic Scoliosis Protocol was developed because back in 2012, we were noticing that we were having a lot of our spine surgeries due to not having a bed in the ICU. Traditionally, anytime a patient had a spinal fusion, they stayed at least one night in the ICU. They're long surgeries and they require a lot of monitoring, so it was kind of a heavy burden on the families and the spouse to have one that was canceled. So, we intended to do this to reduce the number of cancellations.

Dr. Smith: I'm looking at some of the statistics here, Ms. Carter. It looks like on one particular day in 2012, there were 22 of these surgeries that had to be rescheduled. Was that throughout 2012 or was that in one day?

Ms. Carter: That was the year of 2012. There were 22 cancellations due to not having a bed in ICU.

Dr. Smith: Okay. That's a big deal, right Ms. Carter? This is, as you mentioned, there's a lot of preparation by the doctors, the patients, the families. So, to cancel these in depth surgeries is definitely is not good for anyone involved in this case. That's really where this protocol comes from, correct?

Ms. Carter: Correct. Yes. Whenever a surgery is canceled that's a lot of cost to the hospital and a lot of hardship on the families.

Dr. Smith: Talk about the implementation, then, of this protocol. How was it developed and how has it been activated at Children's Mercy?

Ms. Carter: We got a group of multi-disciplinary people together. There were nurses, hospitalists, orthopedic residents, APRN's, we included the PICU and the OR and the PACU, anesthesiology, and administration were all involved. We kind of worked together deciding what it was we would need to create. There were some guidelines created where like what would happen each day once these kids made it to the floor. We streamlined what our surgeons do. We have three spine surgeons, so we made sure that their post-operative paths were the same or close to the same. We developed a power plan for our charting system and then included the hospitalists routinely. These kids were not seen by the hospitalists, so we involve them just because they're a little more medically complex that first day. Then, on the floor, really, we did a lot of teaching and education of the nurses. We sent nurses to watch the spine surgeries and then to go to the ICU afterwards so that they could actually see how the patients were taken care of and what they went through during the surgery.

Dr. Smith: Lots of people involved, right? Lots of different specialists, different hospital personnel. How was it accepted, this protocol? Were people understanding the importance of it? Have they bought into this? What impact has it had on care of these patients?

Ms. Carter: I think it was really well accepted. The nurses loved taking the patients and the doctors – we have had zero cancellations in the last three years. It was implemented in 2013 in March and we have had no surgeries that were cancelled due to lack of ICU beds. As a side note, we've noticed that our length of stay has also decreased. In 2013, we had an average length of stay of 5.36 days and in 2015, that had gone down to 4.53 days.

Dr. Smith: That's incredibly significant and a great outcome. Interestingly, reading about this protocol, Ms. Carter, I came across something that is more of a subjective analysis of it all but I think it's really important because it says that there was a "renewed joy for family and staff nurses empowered to transform the lives of these patients". That sounds really nice. Can you talk into that a little bit?

Ms. Carter: Sure. I think just because we know that they're not having to be delayed on their surgeries due to not having beds and that we can actually start taking care of them right away after surgery. It just makes a better connection with the families and they're not going to one unit and doing something there and then coming to another unit and everything kind of changing. We were finding that that happened a little bit. Like, the ICU would say, "Oh, you can eat" and then we'd come and say, "No, you can't eat yet". I think it's really had a great impact on patient satisfaction and nursing satisfaction.

Dr. Smith: What do you see as the future of this type of protocol? Is Children's Mercy planning on teaching other hospitals and community centers that do these in-depth surgeries? Is this something that you see growing throughout the country? What's the future of the protocol?

Ms. Carter: I definitely think I see it growing. There are already a few hospitals that do it and when we implemented it, we had help from them. I definitely see it growing here at Children's Mercy. I think there are all kinds of kids that have spinal fusions, we have some neuromuscular kids and some more complex kids that get them and I definitely see those being a part of the program in the future.

Dr. Smith: Well, Ms. Carter, I want to thank you for the work that you're doing at Children's Mercy and with this protocol. It's obviously had a major impact and I want to thank you for coming on this show. You're listening to *Transformational Pediatrics* with Children's Mercy Kansas City. For more information, you can go to ChildrensMercy.org. That's ChildrensMercy.org. I'm Dr. Michael Smith. Thanks for listening.