

## Interactive robot befriends hospital's youngest patients to soothe away their anxiety

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Never fear, MEDi the robot is here, ready to calm the nerves of children scared of the hospital and all the things that go with it - like prickly needles and cavernous hallways and mysterious medical equipment.

MEDi, a blue and white robot now on staff Broward Health Children's Hospital, has just the right touch when it comes to keeping little ones calm. This nifty little robot, whose name is short for Medicine and Engineering Design Intelligence, resembles a toy at just 2 feet tall and 15 pounds, but he's been a big hit with the hospital's youngest patients.

He's their companion, pain coach and even their teacher, letting them know what to expect next when they're having blood drawn or a cast removed, said Dr. Patricia Rowe-King, pediatric program coordinator at Broward Health Medical Center.

Broward Health is one of only eight hospitals nationwide using this particular child-friendly robot to help pediatric patients overcome the anxiety and fear associated with most medical procedures, officials there say.

He's also bilingual, ready to chat in English or Spanish.

Purchased with a \$15,000 grant three months ago, MEDi has been used to comfort cancer patients as young as 2 and up to 14. Programmed just



for the pediatric hospital setting, MEDi also gives tips on how to manage pain and stress using deep breathing techniques. He can assist with several procedures, including blood tests, dressing changes, catheter removal, port access and vaccinations.

But most of all, he's knows how to buddy up to the hospital's littlest patients.

MEDi and Tommy Boegler, a 4-year-old diagnosed with kidney cancer in February, have become fast friends in the past few weeks.

When Tommy needs his blood drawn, MEDi is right there with him, telling him what's coming next and distracting him just before the needle prick. To draw Tommy's attention away, he asked for help getting something out of his eye, then said, "You'll never guess what color my blood is. The same color as my toes."

That would be blue, not red.

And when it's all over, he can sing and dance, tell a story or play a game.

"Hospitals can be a scary place," said Kasey Castro, a child life specialist who works with Tommy. "We use him to distract them and to educate them about the procedure. He can make it more fun and less threatening for them."

During an outpatient visit this week, Tommy's mom asked if he thought his little robot friend would remember him.

Tommy was sure he would - and he was right.

MEDi has facial recognition software and can be programmed to greet each child by name.



When MEDi came into the room, Tommy's face lit up.

After saying hello to Tommy, the robot motioned for a high-five. When MEDi danced, playing his own lively tune, Tommy moved along with him.

The past few months have not been easy for Tommy, said his mother, Beth-Ann Boegler, of Tamarac. He spent 100 days in the hospital and has undergone two surgeries, seven radiation treatments and 23 chemo treatments. He has two more to go.

But Tommy thinks it's not so scary now because his robot friend is here.

"MEDi took the fear of being here away," his mom said. "With two surgeries and chemo and radiation, it was all very scary. There were a lot of dark days for a while. We didn't think he'd ever get out of the hospital. But he's doing great now."

Dr. Hector Rodriguez-Cortes, Tommy's physician, says when the robot helps the patient, he's helping the staff as well by making it easier for them to do their job.

"This thing that looks like a toy puts the patient in amore calm state so the nurses can move ahead with the procedure," he said.

The little robot seems to be a hit with doctors as well.

"I've danced with him," Rodriguez-Cortes said. "But it looks like the <u>robot</u> was doing a better job than me."

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