



Medi Teddy ® and the CT Invention Convention

When Ella Casano, now a sophomore in high school, was in fifth grade, her teacher assigned the class their Connecticut Invention Convention project. The kids knew this project was coming, having wandered through aisles of homemade poster boards and prototype inventions in the school cafeteria during each of their previous years of elementary school. 5th grade Invention Convention was seen as a right-of-passage of sorts, and Ella was looking forward to it.

Her teacher explained that the best inventions often solve a problem. Although she couldn't have imagined how serendipitous it would be at the time, Ella did have a problem - a big one. She had been diagnosed at the age of 7 with autoimmune ITP, a platelet disorder that left her at high risk for bleeding or injury. She could not participate in PE, sports, and other activities like her classmates could, and was often left to read a book in the library or sit on the sidelines watching. To help keep her safe, Ella had IV infusions every 6-8 weeks. It was during these infusions that Ella's idea began to form. She hated the sight of all of the medication and bags of blood hanging around her. She said it felt overwhelming to think that all of that medicine had to go inside her body. Ella also noticed that although heroic efforts at distraction, incentives, and rewards went into the time when the nurses were placing her IV, because it was painful, there was nothing that happened afterwards to distract her from all of the medical equipment hanging overhead. So, Ella invented Medi Teddy ® IV Covers to hide her medicine with a friendly face and help to normalize her medical care.

To make her first prototype, Ella chose one of her stuffed animals, a penguin, and pulled all of the stuffing out. She hot glued some mesh material on the back to make a little pocket and made a small hole in the

top of the penguin's head. In this way she could hang the penguin on her IV pole, and the medicine could slip inside the mesh pocket. From the front Ella could see the penguin, and from the back/mesh her nurse could still see her medicine. This is the prototype Ella used for her 5th grade Invention Convention project and she named it "Medi Teddy".

Medi Teddy® went on to the Regional level of Invention Convention with hundreds of other kids from schools around the state. And, although her invention did not progress any further, the feedback from her nurses, her teachers, her principal, her peers, and the judges had been so encouraging that she wasn't ready to let her idea go.

In 6th grade as part of the gifted program independent study in her public school, Ella continued to work on Medi Teddy by writing a business plan, creating a marketing video, and with the help of her mom, filing for her first US patent. In 7th grade came business incorporation, filing for Medi Teddy Inc. 501(c)3 Non Profit(for donations) and I.V. Comfort Solutions LLC (for sales). In 8th grade, building a website, finding a manufacturer, and fundraising to create the first "real" prototype in the shape of a teddy bear, and finally her first order of 500 Medi Teddys was on its way.

By this point Ella's mom, Meg, was getting more and more involved because the family now had to learn about inventory, supply chain, packing and shipping, fundraising, sales, and so much more.

Now, Ella is 15 and in 10th grade. She has two patents pending on both a plush, single user and plastic, reusable Medi Teddy®, a copyright on the IV cover design, and a registered trademark in 29 countries. Her retail business, I.V. Comfort Solutions is a supplier for Medline, the medical supply company and has been a vendor at 23 hospitals. Through sales, donations, directed donations, and hospital purchases more than 8000 Medi Teddys have been shipped to kids and hospitals in 24 countries on 5 continents.

With some guidance from faculty members from UCONN school of nursing, Ella created a survey and sent it to over 800 Medi Teddy users. 95% of respondents said a Medi Teddy improved the emotional well being of their child during infusions, and 85% of caregivers reported it improved the caregiver experience. One nurse described a father who felt so sick at the sight of his child's blood transfusion that he was about to leave his child alone. The nurse brought out a Medi Teddy® and the Dad was able to stay with his child.

Ella's goal is that every child who receives infusions, transfusions, and tube feedings will have a Medi Teddy ® and that one day they will be a standard part of each hospital pediatric room set-up.

Ella never wants children to have to pay for a Medi Teddy ® and so relies on donations, directed donations, grants, and purchases. For more information on how you can help, visit us at www.medi-teddy.org or find us @medi_teddy on Instagram.



Ella with “Hope” plastic Medi Teddy and “Bailey” plush Medi Teddy.
Photo: Kristie Kistner Photography