In 2015, Valley Children’s began to develop an extracorporeal membrane oxygenation (ECMO) program. A core team of clinical experts from our neonatal and pediatric critical care nursing and respiratory teams were chosen to become ECMO Specialists, and began training to manage this lifesaving therapy. The team faced a highly daunting task: to leave their comfort zone as experts in their respective departments and develop new knowledge and skill. As the team embarked on this journey, they knew it would take a great deal of effort and dedication to become the experts our patients and families deserve. To achieve this goal of growth and excellence, the disciplined team diligently upheld the L.E.G.A.C.Y. care delivery model.

The endeavor required strong leadership from Valley Children’s ECMO coordinator, Deborah (Deb) Hernandez. ECMO was a new clinical area for Deb, yet she took on the challenge of building the program, relying on content experts and attending multiple conferences to grow her knowledge base. In times of doubt, frustration and challenges, Deb proved a true leader. She lifted up the team, encouraged each member, and imparted strength.

The Primer/Initiator group also demonstrated leadership. This team arose from our ECMO Specialists to attend additional training sessions that would allow them to become content experts. As champions of the program, they now function as mentors.

The ECMO team has gone above and beyond to provide excellent patient and family care, working over 2,400 hours bedside while learning from preceptors to provide the best care possible. In addition to bedside training, this amazing group of individuals transcended regularly scheduled shifts to put in a combined 2,234 hours of education to ensure competency. These hours do not account for the endless independent study hours, group study nights in a member’s home, or conferences attended.

Although Valley Children’s ECMO program is in its early stages, the team has grown tremendously and continues to work towards its goal of full autonomy from its preceptors. One ECMO Specialist says, “Our team has grown from the overwhelmed, unsure novices that we were, to the proficient, excited, and determined team we are today. Our goal is to grow and develop into experts, one day serving as leaders in the national ECMO community.”

Recognizing that having a child on ECMO must be an overwhelming experience, the team does everything in their power to provide emotional support. They also provide valuable education on ECMO therapy to families, who are as integral to this program as the Specialists.

Participation requires an extremely high level of accountability. ECMO Specialists must make clinical judgments in collaboration with the surgical and medical teams to improve patient outcomes. They must be experts in hemodynamics, advanced lab value analysis, physics, and specialty equipment.
Team members came from different backgrounds, specialties, and training to form one cohesive team. They quickly learned that mutual respect, collaboration, and encouragement were essential to develop, and that each individual brings special knowledge to the team to strengthen them as a whole.

ECMO is still a relatively new therapy with no internationally accepted standards to best perform it. Without clear standards, it can be challenging to define your professional practice. However, over the last year, this multidisciplinary team has worked tirelessly to define best practice. They sought ECMO content experts and equipment specialists, and performed countless literature searches to ensure Valley Children's is providing the best, safest care possible to our patients.

Throughout program development, the team has had to handle frustration caused by ambiguity, sadness when a patient passes, and challenges that arose when a concept seemed too complex. In these difficult moments, when teamwork is crucial, the group encouraged and inspired one another, showing resiliency, determination and compassion. They entered into the unknown and created a program to be truly proud of.

The ECMO team is currently working to be recognized at the international level as an Extracorporeal Life Support Organization (ELSO) Center of Excellence. ELSO is a consortium of physicians, respiratory therapists, nurses, perfusionists, ECMO Specialists, and other healthcare practitioners dedicated to the development and promotion of ECMO as a lifesaving therapy. Valley Children’s ECMO team aligns with the organization’s mission to promote innovation, expertise, clinical support, and community.

A portion of the team will be travelling to Baltimore in September for the Annual ELSO Conference, where they hope to present the team’s work creating a high-fidelity ECMO Simulation Camp in which participants went through 8-hour intensives simulating ECMO initiation, ECMO emergencies and troubleshooting, and patient transport.

The greatest testament to this team comes from the little ones they care for. The lives of 15 children have been saved because of their efforts. What better evidence to Team Excellence than that?

The team expresses gratitude to their wonderful preceptors and colleagues from ECMO Advantage, especially Randy Bartilson, RN/RRT, President of ECMO Advantage; Laurie Fenton, RN, Director of Clinical Operations; Cheryl Poliquin, RN, ES; Shanna Seigal, RRT, EAEC Coordinator, ES; and Tony Weber, RRT, ES. “We could not have built this program without you and we are so grateful for your guidance and patience!”

We salute the ECMO Team for their commitment to evidence-based medicine, and their dedication to their patients, profession, and to our hospital.

Congratulations on being Valley Children’s Team Excellence 2017 award winners.