STAR Treatment

A true technological advance responds to a need with a more efficient solution than the one it replaces. Remember rotary phones and rabbit-eared televisions? The technologies associated with those devices were perfectly fine for their times, but we now know they are not the most effective way to phone home or watch your favorite show.

When it comes to medical technologies, being up-to-date is a critical part of the quality care Children's provides.

A case in point is the Orthotics and Prosthetics Program's recent purchase of its second STARscanner laser data acquisition system.

"We purchased the second machine to keep up with growing demand," said Aaron Smith, Clinical Supervisor, Orthotics and Prosthetics, Children's at Scottish Rite. "Ours is among the largest cranial remolding programs in the nation, and we evaluate more than 1,000 children from all over the southeast each year."



Aaron Smith, Clinical Supervisor, Orthotics and Prosthetics, Children's at Scottish Rite, effortlessly scans a patient on the STARscanner. She will later map the scan data through a comparison utility on her computer showing the infant's current head shape versus normal. Prior to the scanner, Smith said measuring a baby's cranium was much more subjective, and much harder on the child.

"The old method required we use a less reliable hand-casting method to try and define the measurements of the child's head. The 20- to 30-minute process of placing plaster strips on a wriggling baby's head was often traumatic for both parent and child, and was far less precise."

Conversely, the STARscanner takes less than two seconds to scan the infant's head using non-invasive lasers and cameras. It is quicker, cleaner and easier on the child and provides much more precise measurements that allow the orthotist to monitor the condition over time. According to Smith, this is one of the greatest benefits of having the technology.

"We educate parents on repositioning methods to hopefully improve the infant's head shape. However, if the child's condition is not improving, the scanner provides reliable information that allows us to recommend whether a cranial

The STARscanner's primary function is gathering head shape data that is then used to create a cranial helmet to treat children diagnosed with deformational plagiocephaly, or flattened head syndrome. Cases of plagiocephaly have increased dramatically since the early 1990s when the American Academy of Pediatrics launched their life-saving "Back to Sleep" campaign recommending that infants sleep on their backs in order to reduce risk of Sudden Infant Death Syndrome. helmet is needed. It's a great tool that is simple and easy to use and enables us to make better clinical decisions."

And offering better clinical decisions and more child-friendly care is the difference Children's hopes to make for every patient.