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Customer partnership 66 We've relied on Philips and our collective genius to collaborate on new products and ideas

Richard Towbin, M.D. – Division Chief of Pediatric Radiology, Phoenix Children's Hospital

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Who/where

Phoenix Children's Hospital, US

Challenge

Ensure continued growth in quality patient care, research and medical education

Solution

Philips has entered a partnership with the hospital to redefine imaging, patient monitoring and clinical informatics in pediatric care over the next 15 years

Results

- Radiation dose management customized for children
- Improved operational efficiency
- Reduced waste using 3D imaging
- Ability to make confident diagnoses with the IQon CT Scanner
- Improved clinical workflows through faster imaging and decreased scan time

Partnering to innovate in pediatric care

There's a range of unique considerations behind the diagnostic procedure in a children's hospital, which can affect the delivery of a high quality and timely image. These can include maintaining patient safety through managing radiation doses and fast image processing and workflows.

Phoenix Children's Hospital partnered with Philips to put cutting edge technology at the center of its imaging services and position itself as a leader in pediatric medicine through a 15-year agreement, the first with a stand-alone children's hospital system. As one of the largest children's hospitals in the country, Phoenix Children's Hospital provides care across more than 75 pediatric specialties. World-class inpatient, outpatient and emergency care is continuously provided to children and families in the state of Arizona. The hospital is poised for continued growth in quality patient care, research and medical education.

The solution

Partnering in pediatric care

About 10 years ago Phoenix Children's Hospital entered into a long-term relationship with Philips that recently expanded in 2017 to become a strategic partnership. The partnership is committed to clinical excellence; connected patient care; sustainable healthcare centered around the needs of children. Together, Phoenix Children's Hospital and Philips co-designed and tested new dosing protocols in its imaging equipment that are child-sized and appropriate for a particular organ and across different age groups.

"The CT scanner might not come with protocols that are adequate for each hospital situation. We've designed our own protocols to do that, and we've shared those with Philips. So, they're out there in the world, freely available to Philips users," says Dianne Bardo, Director of Body MR; Co-Director 3D Innovation Laboratory at Phoenix Children's Hospital.

Through noise reduction algorithms, radiologists at Phoenix Children's Hospital can decrease or eliminate image noise and still make a diagnosis. With Philips iDose they can control the dial and personalize image quality based on patient needs at low dose.

Advancing 3D imaging innovations

Phoenix Children's Hospital's goal was to provide "more breadth and depth of high-end medical services" and help drive innovation in diagnostics. The introduction of new Philips technologies plays a valuable role in its ability to conduct research, support clinical staff and create an environment where technology drives innovation, while reducing systematic inefficiency. The 3D Innovation Lab at Phoenix Children's Hospital now offers 3D printing and advanced postprocessing technologies, which helps prepare physicians for complex procedures by creating accurate models of defective hearts, limb deficiencies, injured internal organs, and even tumors.

3D technology can help determine a tumor's exact size, and allow physicians to discern subtle changes in size or shape over time and treatment. The exceptional precision of 3D imaging allows oncologists to identify the most viable treatment course for the patient.

"The combination of our technological and software developments with new innovations provides us with the opportunity to look at our data and become as efficient as possible for each level of our operation," says Richard Towbin, Chief of Radiology at Phoenix Children's Hospital.

"We've relied on Philips and our collective genius to collaborate on new products and ideas. Our relationship with Philips provides us a unique opportunity to develop first-of-kind ideas and technologies. This is essential for us to be the best that we can be."

Results at a glance

- Dose management
- Improved operational efficiency
- Reduced waste by using 3D imaging
- Ability to make confident diagnoses
 with the IQon CT Scanner
- Improved clinical workflows through faster imaging and decreased scan time



Looking forward

Phoenix Children's Hospital will continue to partner with Philips to develop new innovations in pediatric care.

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