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# Editorial on the Proper Use of Modifier 63 for Congenital Cardiac Catheterization – Educating User and Payer Alike

Sergio Bartakian, MD, FAAP, FACC, FSCAI

In 2016, members from the Society of Cardiovascular Angiography and Interventions (SCAI), recognizing the lack of codes in the existing CPT® coding structure to capture the work for congenital cardiac catheterization procedures, formed the Congenital Interventional Cardiology Coding Workgroup (CICCW). Since that time, the CICCW has been very successful creating numerous new CPT® codes (**Table 1**) and correcting several long-standing errors in the existing CPT® guidelines, as well.

TABLE 1

| Project   | CPT Meeting Presented  | RUC Survey | RUC Meeting Presented | Status     | When Available | New code (wRVU value)                  |
|---|------------------------|------------|-----------------------|------------|----------------|--|
| Pulmonary artery angiography with device closure bundles          | June 2017              | n/a        | n/a                   | Passed     | Dec 2017       | n/a                                    |
| new pericardiocentesis codes                                      | Sep 2018               | Nov 2018   | Dec 2018              | Passed     | 1-Jan-2020     | 33016 (4.4), 33017 (4.62), 33018 (5.4) |
| Modifier 63 for infants under 4 kg                                | Sep 2018               | n/a        | n/a                   | Passed     | Jun 2019       | n/a                                    |
| Atrial septostomy   | Feb 2020               | Feb 2020   | Apr 2020              | Passed     | 1-Jan-2021     | 33741 (14.0)                           |
| Intracardiac stenting   | Feb 2020               | Feb 2020   | Apr 2020              | Passed     | 1-Jan-2021     | 33745 (20.0) and 33746 (8.0)           |
| ICE for use with broader range of cardiac cath procedures         | May 2020               | n/a        | n/a                   | Passed     | 1-Jan-2022     | n/a (existing code)                    |
| Congenital diagnostic catheterization base codes                  | May 2020               | Jun 2020   | Oct 2020              | Passed     | 1-Jan-2022     | 93X1X - 93X5X                          |
| New Thermodilution code for congenital diagnostic catheterization | May 2020               | Jun 2020   | Oct 2020              | Passed     | 1-Jan-2022     | 93X6X                                  |
| Stent / angioplasty for repair of coarctation of the aorta        | Oct 2020               | Oct 2020   | Jan 2021              | Passed     | 1-Jan-2022     | 338X0, 338X1, 338X2                    |
| Pulmonary artery / ductal stenting                                | Feb 2021               | Feb 2021   | Oct 2021              | Passed CPT | 1-Jan-2023     |  |
| Pulmonary Angiography   | Feb 2021               | May 2021   | Oct 2021              | Passed CPT | 1-Jan-2023     |  |
| Completed   | In process / scheduled |            |                       |            |                |  |

Among the many improvements, a correction was made to add the extensive list of congenital cardiac catheterization codes to the 90000 Code Series of the Medicine / Cardiovascular Section, to be included for use with modifier 63. Despite this change, the specialty continues to meet significant resistance from the payer community with regards to inappropriate denials. The denials stem from incorrect internal guidance on the part of most health insurance companies.

Some payers have incorrectly instructed their staff that the 63 modifier is not to be used to report procedures performed to treat congenital defects. This is entirely false as the modifier is precisely intended for this reason. The entire list of the 90000 congenital cardiac catheterization codes is for exactly that purpose, congenital cardiac defects. The AMA CPT® guidelines do not instruct any limitation for the use of modifier 63 due to the presence of a congenital defect. In fact, the only limitation is for the infant to be under 4 kg body weight at time of procedure.

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Other payers provide incorrect guidance to deny claims which include the term "infant or neonate" in the procedure code. This is also a grossly misstated fallacy. Although all patients under 4 kg are infants and/or neonates, not all infants and/or neonates weigh less than 4 kg.

The official definition of the term infant is for any child under one year of age; and clearly, the far majority of children under one year of age will not be less than 4 kg. CPT® guidance is very clear about which codes specifically include this increased complexity as "the typical patient" for the given CPT® code. These are found in Appendix F and are the only procedures which inherently include the additional complexity for which modifier 63 is intended.

Finally, here is a sample from one payer which states a necessity to have additional documentation, not unlike guidance for modifier 22.

"Documentation from the patient's record must indicate the significantly greater effort required and the reason for the additional work which may include, but not be limited to, increased intensity or time, technical difficulty of procedure that is not described by a more comprehensive procedure code, severity of the patient's condition, or increased physical and mental effort." In fact, there is no other requirement for properly appending modifier 63, aside from the patient weight at time of procedure being under 4 kg, and the specific code be in the approved sections of CPT®. It goes without saying, but modifier 63 is not modifier 22. The documentation regarding the reason for increased intensity, greater effort, technical skill, etc. lies solely on the fact that the child is less than 4 kg. Nothing else is needed to justify this work. To further suggest that "a more comprehensive procedure code" could be used is simply demonstrating the total lack of understanding of coding for congenital cardiac catheterization that is so widespread in the healthcare industry.

The members at SCAI and ACC have spent a great deal of time and effort in creating a comprehensive coding framework to capture the extremely complex nature of coding for this specialty. A great deal of collaboration has taken place with CPT® staff, advisors, and panel members to devise a structure which captures the work performed accurately. It is irresponsible for payers to disregard this effort by creating additional internal guidance which results in inappropriate denials for this very complex work.

For any questions regarding the proper use of CPT® codes for congenital cardiac catheterization, it is strongly advised to reach out to SCAI and/or ACC staff for clarification and guidance. Deb Mariani, SCAI staff, [dmariani@scai.org](mailto:dmariani@scai.org) or James Vavricek, ACC staff, [jvavricek@ACC.org](mailto:jvavricek@ACC.org).

Dr. Bartakian is a board-certified pediatrician and pediatric cardiologist who practices full time in the specialty of congenital cardiac catheterization. He is a former CPT® Alternate Advisor for SCAI and a current AMA RUC Panel member.

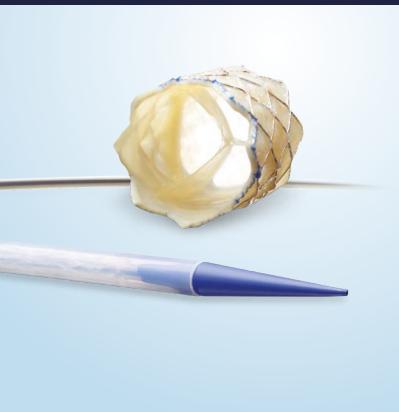


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# The PICS Society Advocacy Program: Power in Numbers!

## Part 1

Kamel Shabbani, MD; Natalie Poli, Ed.S; Norm Linsky, MPA, MA

Let's start a conversation about ADVOCACY—how our community can advocate for lasting changes to laws, regulations, R&D investment, funding, compensation and related issues that impact us all daily. Are there fundamental advocacy goals we all share? Do we, as a professional society, have the obligation to use our collective voice to affect change? Are there opportunities for doctors and patients to advocate as a team? Do we have "power in numbers" by speaking with one voice?

Based on what several of you have told us, the answers are a resounding yes, yes, yes and yes. That's the focus of this month's column and others in the coming months.

We recently posed three questions to colleagues around the world:

- What is the most pressing advocacy challenge in your country?
- What is the most important advocacy challenge globally?
- What should the PICS Society do moving forward?

**Economic challenges in my country:** Starting about ten years ago, my country had problems getting access to international credit and loans. This complex area affected everyone, including those of us who care for children and adults with CHD. Our country's infant mortality rate was about 14 per 1,000 newborns. This, much like our government's ability to qualify for better access to international credit, needed to improve. The government worked with us to create a national plan for improved access and quality of care for those with CHD. We worked hard with the government to implement this plan, making important progress in the past decade. Although progress is slow, we are moving in the right direction.

**Migration:** Another growing challenge relates to migration from neighboring countries. We care for all patients who come to us, but too often migrants do not have ready access to timely care, so we have much work to do—and I believe other countries face similar situations.

**Professional education:** We urgently need to improve medical education and advocate

**Sharing lessons learned:** We need to share ideas about how patients with no insurance or ability to pay can get the care they need. I believe this is a universal problem. I have participated in medical missions in Panama, Peru and elsewhere. Our team will be on site for one or two weeks. However, once we leave the overall situation stays the same. Such missions need to provide more education and involve a broader range of medical professionals. We must promote teamwork and constantly improve, educate and network. Everyone has an important role to play.

**Quality improvement:** The PICS Society can partner with national societies, doctors, hospitals and governments to develop quality improvement plans where you don't have everything. I am in Córdoba, a major city, and have extensive resources available to me. One hundred kilometers away, the situation is totally different: resources are very limited. We all need to work with our respective governments to change this through funding and training. In Argentina our government is eager to partner with us—which is very encouraging!



Let's start the conversation by spotlighting a recent interview we had with Alejandro Peiróne, MD, FPICS, Children's Hospital of Córdoba, Argentina.

*Comments lightly edited for brevity.*

I ask myself every day how we can help improve the quality of life for patients in my country. Several vital areas come to mind.

**"When I first came home to Argentina, I thought I could be like Superman and I could change everything quickly. In reality, change takes time. When I go home each day I feel optimistic that we are making progress! We have much work and opportunity ahead."** – Dr. Alejandro Peiróne

for national training and quality standards. In Argentina, we have few pediatric cardiology specialists. Typically, those with CHD are treated by adult cardiologists; this is the only option. In the largest cities, the quality of prenatal diagnosis for CHD is high, but much less so in the countryside. The PICS Society can partner with national societies to develop national training standards and professional education programs—and advocate for their funding.

**Global networking:** The importance of networking, connecting and sharing ideas globally cannot be overstated. Whether we are discussing quality, education, funding, regulations or other issues, our opportunity to network to achieve common goals is what encourages me.

**Optimistic attitudes, realistic expectations:** I have been in Argentina since I completed training 20 years ago. When I first came



home to Argentina, I wanted to change everything! I thought I could be like Superman and I could change everything quickly. In reality of course, change is difficult and takes time. I go home every day and I feel optimistic to see how younger physicians and their teams are getting better training, getting published and trying hard – every day – to offer high quality health care to patients.

*Working with the national government:* If our government is to help, it needs access to data showing CHD treatment and outcomes over time: this is essential to encourage the government to continue investment in CHD care in Argentina and I am sure elsewhere. Our PICS Society has an important information sharing role in that regard.

*Final thoughts:* We very much need global cooperation. The PICS Society can partner with societies in Argentina, South America and worldwide. I am glad the Society is a global organization dedicated to international cooperation. This is a decathlon—not a hundred-meter dash!

What are your thoughts about advocacy? Want to get involved? Email [nlinsky@CHDinterventions.org](mailto:nlinsky@CHDinterventions.org). Thank you Dr. Peiróne and the PICS Society Advocacy Committee (John Cheatham, MD, Chair; Clifford Kavinsky, MD, PhD, Co-Chair; Hideshi Tomita, Co-Chair). More interviews to come next month!



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Successfully treated interventional for CHD, 2006  
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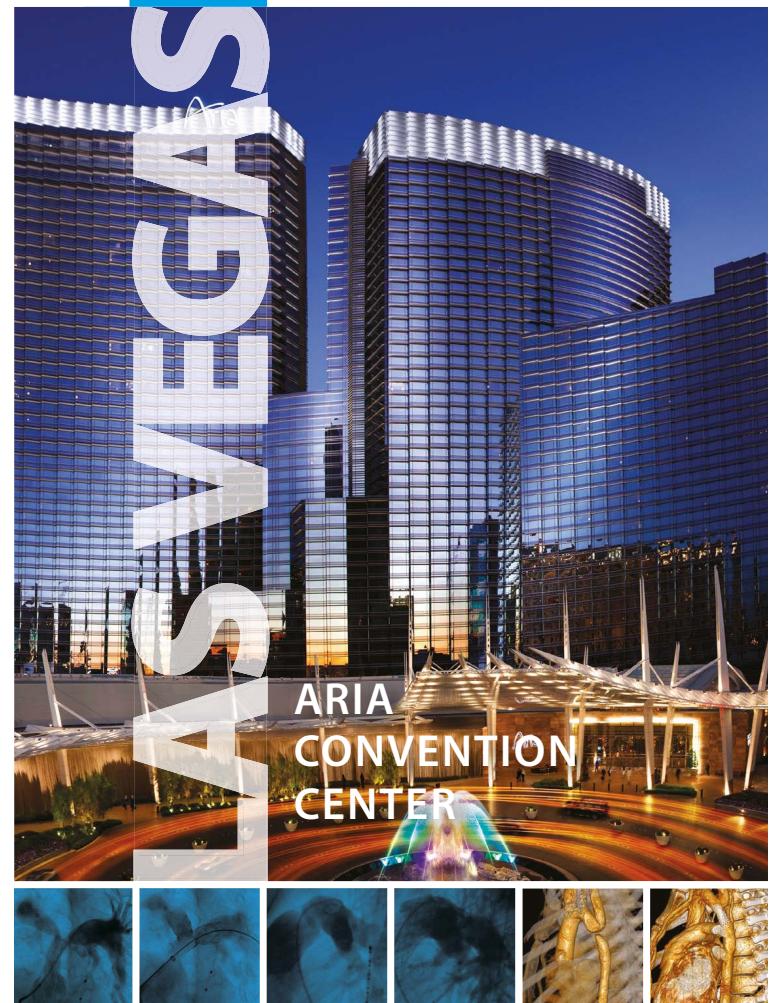
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# Delayed Aortic Coarctation Balloon Dilatation After Duct Coil Occlusion

Francisco Javier Ozores Suárez, MD, MS; Francisco Diaz Ramirez, MD; Juan Carlos Ramiro Novoa, MD; Alejandro González Veliz, MD

**Key Words:** Patent ductus arteriosus, Coarctation of the aorta, Transcatheter treatment.

## Summary

There are different approaches to the treatment of the combination of Patent Ductus Arteriosus and Coarctation of the Aorta in children using cardiac catheterization. We report, after eight years of follow up, an unusual staged closure of Patent Ductus Arteriosus and aortic ballooning in two separate procedures with several years in between. This child underwent coil patent ductus arteriosus occlusion at nine months of age and later only aortic balloon dilatation performed at the age of six-years-old, with good outcome of the coarctoplasty and no mislay of the right positioning of the coil.

## Introduction

Small children with Coarctation of the Aorta (CoA) and Patent Ductus Arteriosus (PDA) usually undergo surgical correction, but transcatheter closure of moderate to large ductus arteriosus with occluder devices and coarctoplasty is now practiced more frequently using different techniques, devices and timing, depending on the patient.<sup>1</sup>

We report an aortic balloon dilatation and PDA closure in sequential approach, with some years in between, in a small child who first underwent coil PDA occlusion and later only aortic balloon dilatation with both balloon and coil in a very close spatial relationship.

## Clinical Case

Fifteen-year-old female adolescent with diagnosis at the age of seven months of: aortic coarctation, patency of the arterial duct, small-subaortic Ventricular Septal Defect and bicuspid aortic valve.

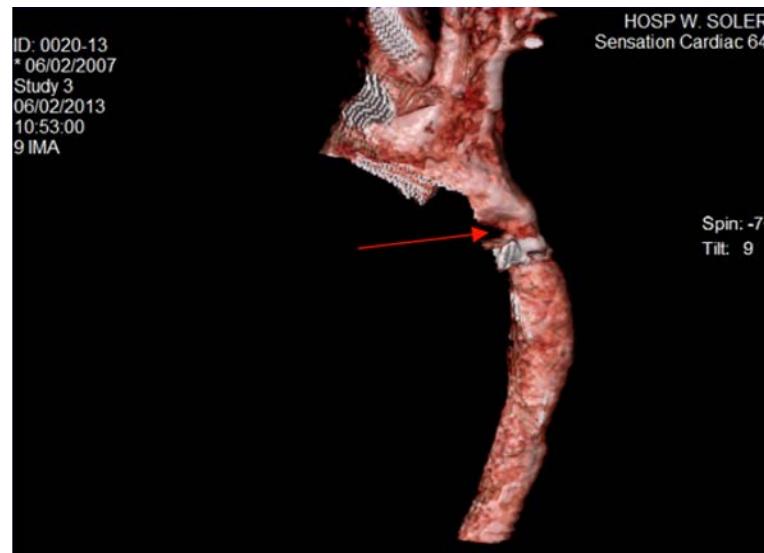
At the age of eight months, this patient underwent only balloon dilatation of the coarctation because, at that time, it was identified as the target lesion. Additionally, there was not consensus about the presence, or not, of an adequate diameter of the aorta to deploy a device without worsening the lumen of the aorta due to a possible bulging of the aortic retention skirt of the device, which has been reported.<sup>2,3,4</sup>

One month later the patient underwent ligation of a 4 mm PDA, but a mild to moderate residual leak was evident at the level of the PDA by echo the day after the surgery.

At the age of two years, the patient underwent transcatheter closure of the residual PDA leakage using a detachable coil with

no residual shunt. At that time there was no significant gradient at the level of the former coarctation site. However, four years later, a new coarctoplasty was indicated because after echo followup a gradient of 52 mmHg was identified at the level of the coarctation. At that time an angiotomography was also performed showing the narrowing of the aortic coarctation at the ductal level (**Figure 1**).

Before the procedure, the Telecardiogram showed a 0.59 Cardiac-Toracic Index with normal pulmonary flow. The EKG showed sinus rhythm, incomplete right-bundle branch block, QRS axis 60



**FIGURE 1** Narrowing of the aortic coarctation (arrow) at the ductal ligament level.

degrees and a Sokolow index of 14 mm. The angiography prior to the interventional procedure showed a diameter of 6.8 mm at the coarctation level and the diameter of the abdominal aorta at the diaphragm level was 12mm.

Once the coarctation balloon dilatation procedure was initiated, the arch of the aorta was crossed with a 0.021 × 260 cm Terumo wire using a 6 Fr multipurpose catheter from the right femoral artery access. Conventional angioplasty was performed with a 12 X 4 mm Tyshak balloon (**Figure 2 A-C**). The ballooning was repeated twice using the hand pressure. With the procedure, the peak pressure gradient across the coarctation was reduced to 0 mmHg. During the procedure heparin was administered at 100 mg/kg. It was indicated immediately after the sheath of the femoral artery was put in place.

Post-procedure period was uneventful. Patient was discharged from the hospital five days after the intervention. At the two week follow-up, the patient was stable and remained asymptomatic. Follow-up echocardiography after eight years revealed in-situ



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PDA coil device with no residual shunt and no indications of recoarctation with 15 mmHg pressure gradient at the site of coarctation balloon dilatation.

## Discussion

The transcatheter treatment for Coarctation of the Aorta associated with Patent Ductus Arteriosus in children and adults has been frequently reported in the past, performing the procedure either at the same time or sequentially.<sup>5</sup> Reports include the use of balloon, stent and even covered stent.<sup>6,7,8,9,10</sup> Due to the circumstances surrounding our patient without ample duct ampulla to have a previous sternotomy, the presence of residual shunt, and re-coarctation after surgery for PDA, we decided on re-coarctoplasty even though the patient had a previous device at the PDA site. There are previous reports in older patients with the use of Amplatzer devices at PDA level deploying a stent which included both the PDA device and the coarctation leading to better stabilization of the PDA device<sup>11</sup> but, to the best of our knowledge, this is the first report about performing a successful aortic coarctation ballooning over a detachable coil in PDA position in such a young patient with a long follow-up period.

## Conclusion

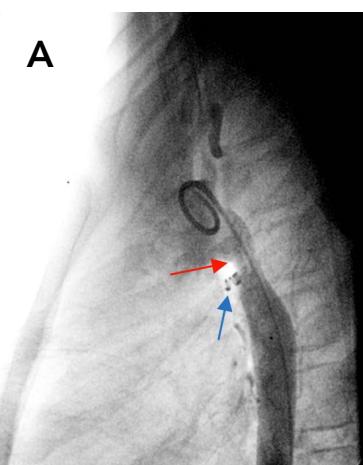
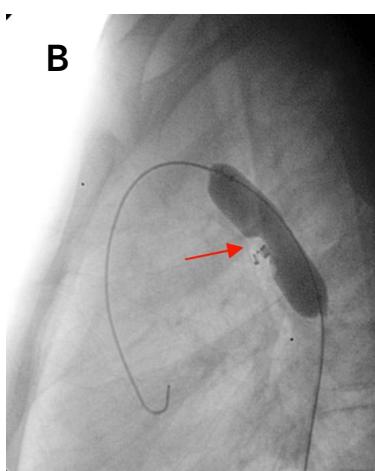
Transcatheter treatment of CoA and PDA in small children is safe. In the presence of previous PDA closure with detachable coil devices, it is possible, after some years, to perform balloon aortic dilatation with a by hand insufflation of the balloon.

FIGURE 2

(A) Aortic narrowing (red arrow) at the same level of the PDA coil occluder device (blue arrow).

(B) Ballooning the coarctation still showing a notch at the level of the device (arrow).

(C) Final angiogram showing no residual narrowing of the aorta.



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## OCTOBER

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**07-09**

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**14-16**

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### 11<sup>th</sup> Annual Fetal Echocardiography Symposium at UCLA: Clinical Tips and Pearls from the Experts

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# Nationwide Children's Hospital Once Again Named on U.S. News & World Report's 2021-22 Best Children's Hospitals Honor Roll

Eighth Consecutive Year for "Best of the Best" Recognition

Nationwide Children's Hospital has been named once again to *U.S. News & World Report's Best Children's Hospitals* Honor Roll. The Honor Roll is a distinction awarded to only 10 children's medical centers nationwide recognized by *U.S. News* as the "Best of the Best." Nationwide Children's was once again recognized at number 8 on the Honor Roll list.

The 2021-22 Honor Roll designation marks the eighth consecutive year Nationwide Children's has received this distinction. The Honor Roll list is based on a hospital's cumulative ranking in 10 specialties evaluated by *U.S. News*.

"Despite the uncertainty posed by the COVID-19 pandemic, our team's commitment to the children in our community and globally has never wavered," said Tim Robinson, Nationwide Children's CEO. "These rankings highlight the high-quality care Nationwide Children's provides and are a testament to our incredible team."

"When choosing a hospital for a sick child, many parents want specialized expertise, convenience and caring medical professionals," said Ben Harder, chief of health analysis and managing editor at *U.S. News*. "The *Best Children's Hospitals* rankings have always highlighted hospitals that excel in specialized care. As the pandemic continues to affect travel, finding high-quality care close to home has never been more important."

The annual *Best Children's Hospitals* rankings, now in their 15<sup>th</sup> year, are designed to assist patients, their families and their physicians in making informed decisions about where to receive care for challenging health conditions.

The *U.S. News & World Report Best Children's Hospitals* ranking is one means of being recognized for continued progress and improvements in pursuing best outcomes, integrated care and research. For more information, visit *Best Children's Hospitals* and use #BestHospitals on Facebook and Twitter.

*U.S. News & World Report's 2021-2022 Best Children's Hospitals* rankings of Nationwide Children's individual medical specialties include:

- Cancer - #8
- Cardiology and Heart Surgery - #34
- Endocrinology - #11
- Gastroenterology and GI Surgery - #11
- Neonatology - #43
- Nephrology - #9
- Neurology and Neurosurgery - #6
- Orthopedics - #9
- Pulmonary Medicine - #7
- Urology - #11



## About Nationwide Children's Hospital

Named to the Top 10 Honor Roll on *U.S. News & World Report's 2020-21* list of "Best Children's Hospitals," Nationwide Children's Hospital is one of America's largest not-for-profit free-standing pediatric health care systems providing wellness, preventive, diagnostic, treatment and rehabilitative care for infants, children and adolescents, as well as adult patients with congenital disease. Nationwide Children's has a staff of more than 13,000 providing state-of-the-art pediatric care during more than 1.6 million patient visits annually. As home to the Department of Pediatrics of The Ohio State University College of Medicine, Nationwide Children's physicians train the next generation of pediatricians and pediatric specialists. The Abigail Wexner Research Institute at Nationwide Children's Hospital is one of the Top 10 National Institutes of Health-funded free-standing pediatric research facilities.

More information is available at [www.NationWideChildrens.org](http://www.NationWideChildrens.org).



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# Phoenix Children's Ranked in all 10 Specialties by U.S. News & World Report's Best Children's Hospitals

The Health System is Arizona's Only Children's Hospital Ever to be Named to the List

For the fifth time, **Phoenix Children's Hospital** has earned national rankings from *U.S. News & World Report's Best Children's Hospitals* in 10 out of 10 ranked specialties. The



health system is the only children's hospital in Arizona ever to have been recognized by *U.S. News & World Report* and one of only 22 children's hospitals in the United States to rank in **every surveyed specialty** for 2021-2022.

"We are incredibly proud of our clinicians, administrators and staff who overcame immense challenges last year and redoubled their efforts to provide hope and healing to Arizona families," said Robert L. Meyer, President and CEO of Phoenix Children's. "We've set our sights on becoming the top destination for pediatric health care in the region. Key to this goal is our ever-expanding footprint as Phoenix Children's brings high-quality services closer to home for families in the West Valley, the East Valley and throughout Arizona."

Every year, *U.S. News & World Report* ranks children's hospitals in 10 clinical specialties using a variety of measures including clinical

expertise, patient outcomes and national reputation. The 2021-22 rankings mark the 11<sup>th</sup> consecutive year Phoenix Children's has been named among the nation's "**Best Children's Hospitals**" and the fifth time the health system has received high marks in all 10 areas:

- Neonatology - #20
- Cardiology & Heart Surgery - #28, represented by Phoenix Children's Heart Center
- Neurology & Neurosurgery - #30, represented by Barrow Neurological Institute at Phoenix Children's
- Orthopedics - #33, represented by the Herbert J. Louis Center for Pediatric Orthopedics and Sports Medicine
- Nephrology - #35
- Cancer - #36, represented by Phoenix Children's Center for Cancer and Blood Disorders
- Gastroenterology & Gastroenterology Surgery - #36
- Diabetes & Endocrinology - #37
- Pulmonology & Lung Surgery - #40
- Urology - #48

"Achieving top rankings in all 10 specialties reflects the strength of our reputation for clinical excellence among

physicians nationwide and as a pediatric health system offering world-class care," said Michael Ritchey, MD, Senior Vice President and Chief Medical Officer at Phoenix Children's. "This recognition validates our hard work over the past year, but we are not content to rest on our laurels and will continue to push for the best clinical outcomes for our patient families."

Scoring for *Best Children's Hospitals* includes objective measures such as patient outcomes as well as a hospital's available clinical resources and compliance with best practices. Rankings also reflect survey results from thousands of pediatric specialists who rate children's health systems based on where they would send their sickest patients, without respect to proximity or cost.

Phoenix Children's *Best Children's Hospital* recognition is one of many clinical distinctions the health system achieved recently. In the past year, Phoenix Children's was verified a Level 1 Children's Surgery Center from the American College of Surgeons, earned accreditation from the Adult Congenital Heart Association as an Adult Congenital Heart Disease Comprehensive Care Center, was verified a Tourette Association of America Center



of Excellence in partnership with Banner Sun Health Research Center, and was named Hospital of the Month by Children's Hospitals' Solutions for Patient Safety.

## About Phoenix Children's

Phoenix Children's is one of the nation's largest pediatric health systems. It comprises: Phoenix Children's Hospital—Main Campus, Phoenix Children's Hospital—East Valley at Dignity Health Mercy Gilbert Medical Center, four pediatric specialty and urgent care centers, 11 community pediatric practices, 20 outpatient clinics, two ambulatory surgery centers and six community-service-related outpatient clinics throughout the state of Arizona. The system has provided world-class inpatient, outpatient, trauma, emergency and urgent care to children and families for more than 35 years. Phoenix Children's Care Network includes more than 850 pediatric primary care providers and specialists who deliver care across more than 75 subspecialties. For more information, visit us at <http://phoenixchildrens.org/>.



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