Top Ten Things to Know
Telemedicine in Pediatric Cardiology

1. Advancements in technology and broadband have revolutionized the current practice of medicine. The field of pediatric cardiology is no exception given the need for prompt diagnosis and reliance on cardiac imaging to identify infants and children with potentially life-threatening cardiovascular disease. This scientific statement explores both neonatal and fetal tele-echocardiography, and provides a broad, comprehensive document reviewing various aspects of telemedicine in pediatric cardiology.

2. This scientific statement also provides a detailed review of the legislative, public policy, and legal aspects of telemedicine in pediatric cardiology and telemedicine, along with financial and reimbursement information for clinicians.

3. Advancements in modern technology and broadband have markedly affected and enabled the progression of telemedicine to its current state. Telemedicine should be thoughtfully integrated into clinical practices and partnering institutions in a well-defined and efficient manner.

4. The application of telemedicine is useful in diagnosing and triaging critically ill patients, as well as stable outpatients, newborns, infants, and children, when distance or time creates challenges or an inaccessibility to pediatric cardiac care.

5. Telemedicine should be thoughtfully integrated into clinical practices and partnering institutions in a well-defined and efficient manner. In most cases, the potential advantages of telemedicine in pediatric cardiology can include improving access to care, improving quality, and saving lives.

6. Telemedicine has been particularly useful for newborns when evaluating for possible Congenital Cardiac Heart Disease (CCHD), particularly when the infant is cyanotic or in extremis, and, for example, differentiating CCHD from persistent pulmonary hypertension of the newborn.

7. The greatest potential for telemedicine is in the confirmatory testing. Once a positive screen is obtained, telemedicine can provide timely access to pediatric subspecialists in neonatology or cardiology for assessment and recommendation. Telemedicine can expedite movement to more precise cardiac care or prevent unnecessary care or transport to tertiary centers.

8. Telemedicine can be a very powerful tool to facilitate care and disease prevention in low- and middle-income countries. Unique challenges to successful implementation of global telemedicine include time zone differences, language and cultural characteristics, local government telemedicine policies, Internet security, and equipment availability and maintenance. Limited bandwidth and lack of access to broadband connectivity are important barriers that must be considered and addressed in the design of global telemedicine partnerships.

9. The rapidly evolving healthcare climate includes a growing emphasis on cost containment, quality and outcomes, patient-centered care, and technology solutions, all of which are well served by the optimal use of telemedicine. The body of evidence compiled in this scientific statement can serve as a call to action for these groups to work closely with healthcare professionals to address reimbursement, licensure, and credentialing obstacles and to allow telemedicine to become fully integrated into our healthcare system.

10. Telemedicine providers must monitor telemedicine programs to confirm that the program operates in a way that complies with the applicable laws and regulations identified in this overview, as well as any applicable accreditation requirements (such as The Joint Commission) and CMS Conditions of Participation for hospitals and critical access hospitals (if applicable), and meets the appropriate standard of care.