Challenges & Risks Faced of AI Implementation in Healthcare for Pediatric Providers

Understanding and addressing the challenges and risks is critical for success

Physical and Physiological Changes



- Children undergo numerous developmental phases with changes in body composition from the neonatal period to adulthood
- Significant sample size in model development may be impacted.

Pediatric Disease States



- Some diseases are specific to children and are less prevalent in adults. For example, Wilms' tumor and neuroblastomas.
- Some rare pediatric diseases may not have the data sets to support AI models, nor be applicable

Pediatrics vs Adult AI models/solutions



- Pediatric imaging may use different technical parameters, such as dose reduction, resulting in different tissue contrast.
- Digital Health industry focuses on adult care solutions. Market solution depth may lack

Patient and the Family



- Due to patients status as minors, rights on care, treatment, program adherence require additional stakeholders and considerations
- Disclosures must account for multitude of stakeholders
- Opt in and opt out of pediatric data collection and data set inclusion must be considered