



National Association of Pediatric Nurse PractitionersSM

TechQuity and the Future of Pediatric Health Care

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“Use every skill you have to create change and envision a world that no one has seen yet, because I believe it’s possible, it can all be different, and it is up to us to make it so.” Monica McLemore, PhD, RN (McLemore, 2020).

Colleagues, 2023 marks a monumental milestone as the National Association of Pediatric Nurse Practitioners celebrates its 50th anniversary! I cannot express how honored and humbled I am to lead such an important and impactful organization. I am grateful to our vibrant community of pediatric-focused advanced practice registered nurses (APRNs) whose shared mission to improve pediatric health serves as my professional North Star. Considering our collective commitment to optimizing child and family health, I wonder what the future will hold for pediatric health care.

Numerous seminal documents are setting the stage for re-envisioning health care in pursuit of health equity (American Association of Colleges of Nursing, 2021; Institute of Medicine., Board on Health Sciences Policy, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, 2003; National Academies of Sciences, Engineering, and Medicine, 2021). Technology will be an

indispensable tool in this pursuit, whether used to increase access to health care providers, provide tools for health monitoring and management, facilitate accessible education opportunities, or countless other applications. However, despite the tremendous promise of technology, we must also exercise caution that such advances do not perpetuate the inequities we endeavor to solve. With respect to health care, access to technology tools, digital literacy, and community infrastructure (i.e., internet) are increasingly recognized as digital determinants of health (DDoH) in that they are important barriers or facilitators that impact health outcomes. To that end, TechQuity is an emerging term that reflects the “strategic development and deployment of technology to advance health equity” (Rhee et al., 2021).

As we consider our role in promoting TechQuity in pediatric health care, I hope we can leverage the lessons learned from the coronavirus disease 2019 pandemic. We implemented technology solutions at breathtaking speeds to address some of our most pressing issues: schools offered remote instruction, health care providers adopted telehealth, and entire sectors of our workforce transitioned to remote work. None of these implementations were flawless, but such widespread adoption has affirmed the essential role and the promise of technology in our everyday lives. With a TechQuity lens, we now can shift to asking: Who did this innovation not benefit? Who did it not serve?

To illustrate a TechQuity perspective, consider telehealth. Telehealth provided a modality by which we could continue providing critical access to health care amidst a global pandemic. However, successful telehealth engagement requires a high-speed internet connection, computer equipment, and digital literacy, or the ability to navigate and communicate digitally (DDoH; Richardson et al., 2022). Emerging evidence indicates disparities in telehealth during the pandemic among children from low-income, rural, and minoritized families (Sen et al., 2022). The solution is not to abandon telehealth but to focus on addressing DDoH to ensure that our patients have equitable access to quality telehealth care. Such solutions may include ensuring access to computers (e.g., schools, libraries), high-

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speed internet, and telehealth platforms that meet a wide range of patient and family needs, such as multiple languages and/or integration of interpreter services, support of closed captioning and/or American sign language interpretation, and mobile device access (Curfman et al., 2021).

Telehealth is just one example of many in which a TechQuity lens may identify important opportunities for advancing health equity. Race-based guidelines and clinical algorithms incorporated into electronic health records are stunning examples of how technology can perpetuate health inequities (Wright et al., 2022). In my clinical work focused on pediatric asthma, the most common chronic condition of childhood, the nearly universal use of spirometry (lung function testing) reference datasets that employ race-based corrections inflate pulmonary status, risking under-recognition and undertreatment of uncontrolled asthma among persons of color. Spirometry remains an invaluable clinical tool, but I have adjusted my use of it to exclude race-based designations as a small but meaningful step toward equitable care.

Advancing pediatric health equity is a critical pursuit that will require a willingness to critically examine and re-envision our existing systems and processes. Technological advances have created unprecedented access and opportunity for health care innovation, but such advances require cautious evaluation and consideration of DDoH. In light of this very important special issue of the *Journal of Pediatric Health Care* dedicated to examining the impacts of the coronavirus disease 2019 pandemic on children and youth with special health care needs, I encourage us all to consider how TechQuity may be leveraged to address care inequities in this often marginalized population. As expert clinicians, educators, scholars, advocates, and leaders, our pediatric APRN

community will be instrumental in leading this transformative work.

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