



2024
2026

Digital Transformation Strategy

Leadership message

At SickKids, we recognize the pivotal role that digital transformation plays in shaping the future of health care. Nearly everything we do – the art and the science of our work to serve patients and families – has a digital underpinning.

When the COVID-19 pandemic arrived, it introduced a long tail of new challenges and opportunities. From the need to create safe digital experiences to completely shifting the way we work, these opportunities reaffirmed that investing in digital transformation is essential for the sustainability of our health system.

Globally, health systems are maturing in their use of data, advanced analytics, and artificial intelligence to individualize care and experiences.

Sincerely, _____

At SickKids, we are modernizing in every sense of the word. The Precision Child Health movement is unlocking new potential to diagnose faster, treat smarter, and predict better. In parallel we're re-imagining patient and family experiences and redeveloping our campus. As old wings come down and modern infrastructure rises, we will infuse our physical spaces with state-of-the-art technology, matched with fluid digital connectivity, evolved experiences, and new ways of working.

Developed in partnership with patients, families, staff, and technology experts, SickKids' first **Digital Transformation Strategy** will serve as our roadmap to an intuitive, accessible, sustainable, and seamlessly connected future.

Executive Sponsors of Digital Transformation Strategy



Ronald Cohn
President & CEO



Sarah Muttitt
VP & CIO



Jeff Mainland
EVP



Patient sharing their health data from their device

Definitions

Technology

Technology refers to the application of scientific knowledge and engineering principles to create tools, systems, and devices that solve practical problems or enhance human capabilities. It encompasses a wide range of physical and intellectual tools, from simple machines to complex computer systems.

Data

Data is raw, unprocessed information in the form of facts, statistics, measurements, or observations. It can exist in various formats, including numbers, text, images, or multimedia. Data becomes valuable when it is processed, analyzed, and transformed into meaningful information.

Digital

Digital is often associated with electronic technology and information that is stored and transmitted in a digital format, as opposed to analog. Digital technologies use discrete, quantized data.

Digital Transformation

Digital transformation is the strategic use of digital technologies to fundamentally change or improve business processes, customer experiences, and organizational culture. It involves the integration of digital technologies into all aspects of an organization to create new business models or optimize existing ones.

Digital Innovation

Digital innovation refers to the application of digital technology in a new or improved way to solve problems, enhance existing processes, or create new opportunities. It can involve the development of new digital products, services, business models, or enhancements in digital user experience.



Patients engaged in immersive and interactive digital experiences

How we got here



325

Patient and family survey responses



400+

Digital initiatives inventoried



18

Patient, family and staff focus groups



21

Review sessions of draft strategy



Journey from paper to Electronic Medical Records

Why is this strategy important?

The Digital Transformation Strategy will support cohesive implementation of digital activities towards achievement of organizational priorities. The strategy will usher in a new era of Precision Child Health and advance SickKids as a learning health system.

In a learning health system
research influences care and care influences research,
characterized by:

- A focus on equity and population health
- Intelligence-driven decision making
- Integration of research and clinical care
- A collaborative, interdisciplinary approach
- Patient and family-centred services
- Continuous improvement and innovation
- Technology utilization

RESEARCH

CARE



Blood drawn for RNA sequencing, driving Precision Child Health

CUSTOMER EXPERIENCE



Create a seamless digital child and family experience

- Co-design a connected ecosystem of digital solutions across clinical care, research, and education
- Ensure the ecosystem is equitable, accessible, and intuitive, and:
 - facilitates communication and data exchange between patients, families, internal and community care teams, and researchers
 - provides easy to access personalized clinical, research, and service information
 - supports education and capacity building for self-management
 - enables access to virtual care



Advance intelligence-driven child health services

- Capture comprehensive patient data – including genomic, PROM, and SDoH data – to enable individualized care and population health management
- Improve child health outcomes through safe, inclusive, and ethical design, testing, deployment, and monitoring of AI
- Enhance clinical and operational decision making with real-time insights
- Establish and expand remote care management

HEALTH SCIENCES AND OPERATIONS



Digitally enable new ways of working

- Advance a unified communications strategy, including enterprise communication tools and collaboration platforms
- Digitize and streamline clinical and corporate support functions
- Harness AI and automation to augment our workforce, target resource gaps, and increase well-being
- Implement digital tools to facilitate research, quality improvement, evolved educational modalities, and health system collaboration and capacity building



Modernize our digital foundations

- Invest in talent, training and development, policies, and best practices
- Embed robust cyber security, privacy, and resiliency across systems, solutions, and workflows
- Increase interoperability to facilitate data exchange and learning across internal and external systems
- Advance a contemporary data strategy encompassing governance, access, quality, and architecture
- Continually evaluate and upgrade our enterprise backbone (hardware, software, network, and storage solutions)
- Integrate technology and data infrastructure and transformation into campus redevelopment

FOUNDATIONS

Key enablers

Training, development, and digital literacy · Effective governance · Aligned intake and selection · Sustainable funding of digital priorities · Digital integration with community systems

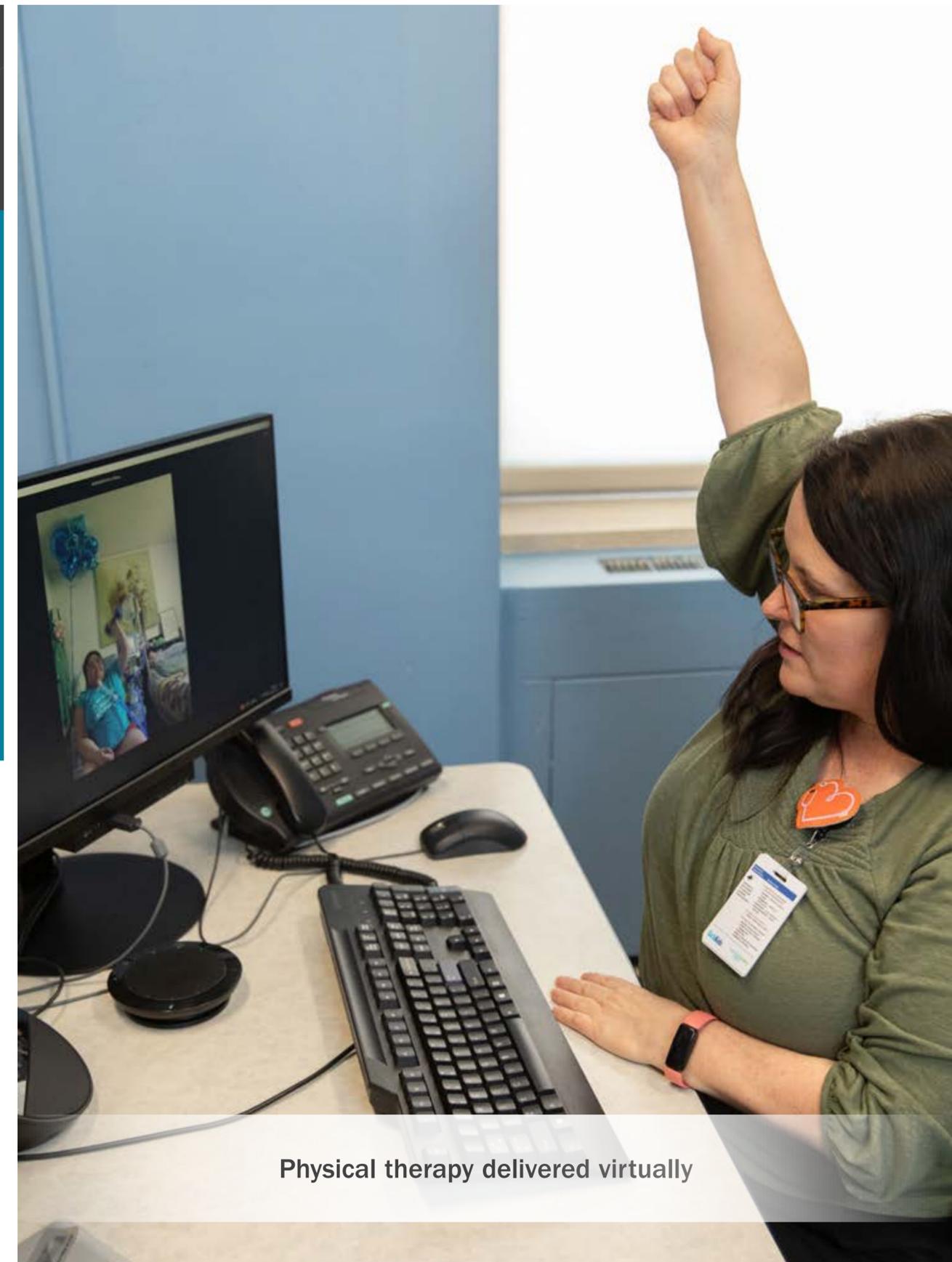
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SickKids is committed to partnering with children, youth, families, and caregivers to co-design a more seamless digital experience. Through design and adoption of a digital front door that connects users to the organization's full range of services and supports, we will better harness technology and data to tailor research, education, and care to the

unique needs and preferences of the community we serve. Improving connections between patients and families, health professionals, and the broader health-care community, SickKids will optimize access to services, flow of information, value of investments, and ultimately, empower patients and families as active partners in their health journey.



Physical therapy delivered virtually

Advance intelligence-driven child health services



- Capture comprehensive patient data – including genomic, patient-reported outcomes measures (PROM), and social determinants of health (SDoH) data – to enable individualized care and population health management
- Improve child health outcomes through safe, inclusive, and ethical design, testing, deployment, and monitoring of AI
- Enhance clinical and operational decision making and actions with real-time insights
- Establish and expand remote care management

Every child deserves the best care possible, tailored to their unique needs, preferences, and circumstances. To achieve this, SickKids will utilize data, analytics, and responsible artificial intelligence (AI) to power intelligence-driven child health services. SickKids acknowledges the importance of using data and AI in a safe, ethical,

and trustworthy manner, with respect for the rights and preferences of children and their families. To achieve our aim to transcend geography with virtual care, SickKids will establish and scale high quality remote care management, improving convenience, access, and care closer to home.



Using data to power child health services

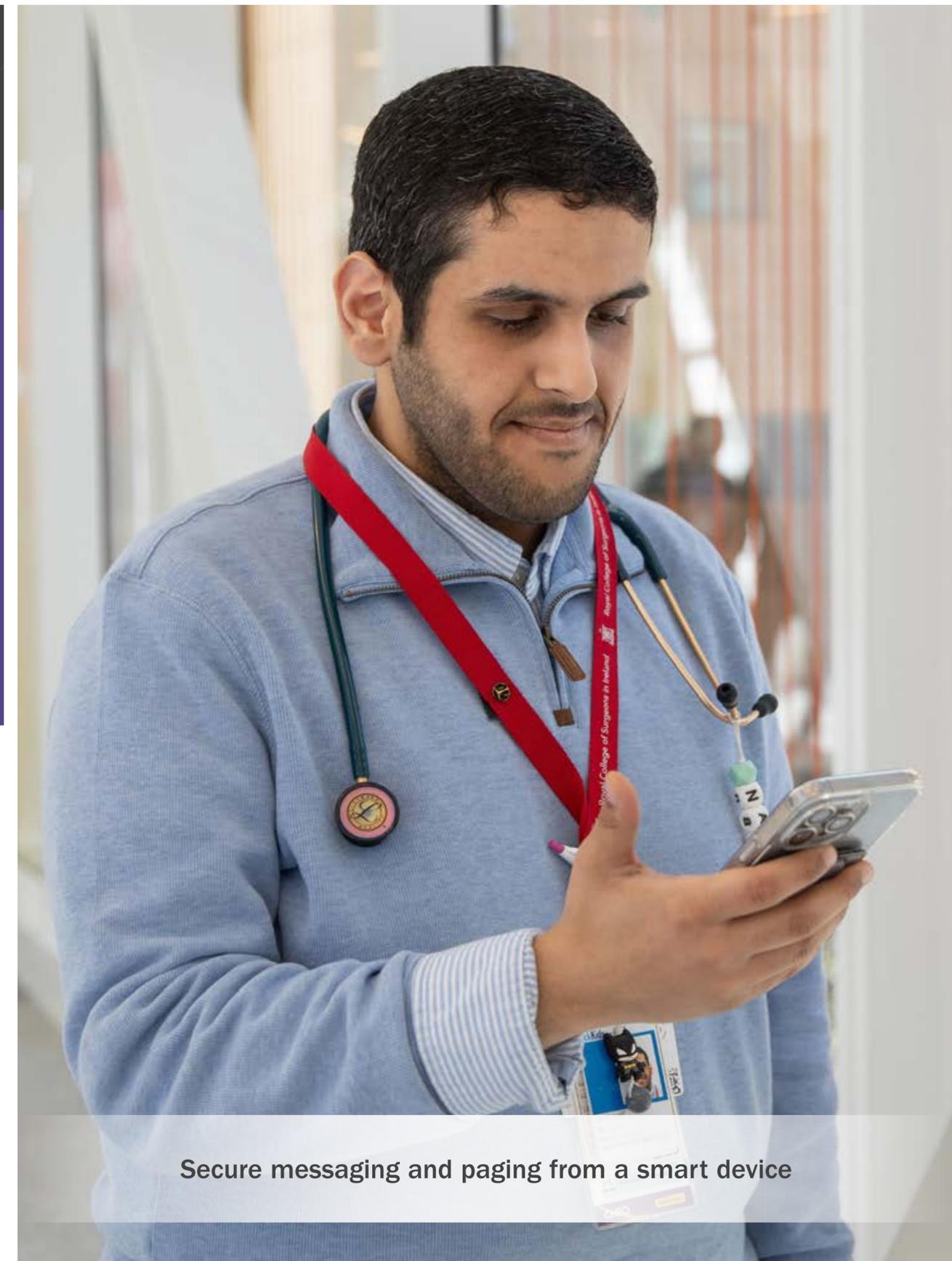
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By harnessing the power of digital innovation and AI, SickKids is cultivating a culture of excellence, engagement, and continuous learning among its dedicated staff, clinicians, and researchers. SickKids will adopt state-of-the-art digital tools, including easily accessible data repositories, dynamic online learning platforms, and intuitive group collaboration tools, that will facilitate groundbreaking research, drive quality improvement, and deliver high quality and safe care.

SickKids' aim is to enhance the capabilities of our staff, clinicians, and researchers so that they can spend more time engaging with patients and their families, participate in meaningful activities that enhance overall care and services, and ultimately increase overall well-being and job satisfaction.



Secure messaging and paging from a smart device

Modernize our digital foundations



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Modernizing SickKids' digital foundations and infrastructure will set a robust path for enterprise digital transformation. Staff, clinicians, and researchers will be empowered to easily access and effectively utilize data and technologies, fueling groundbreaking discoveries, streamlining clinical translation, enabling operational enhancements,

and unlocking a wealth of benefits for patients and families. SickKids' secure and modernized digital infrastructure will be the essential underpinning for innovation and excellence, fostering the best possible experience for patients and families, as well as staff, clinicians, and researchers.



Network architecture hardware