

Cincinnati Children's Hospital Medical Center

CINCINNATI, OH

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Background

Located in Cincinnati, Ohio, Cincinnati Children's Hospital Medical Center is one of the oldest (established in 1883) and most distinguished pediatric academic medical centres in the US. The hospital offers comprehensive clinical services, from treatments of rare and complex conditions to well-child care. With nearly 600 registered beds, Cincinnati Children's had more than 1.1 million patient encounters and served patients from all 50 states and 53 countries in 2013. In the 2014–2015 *U.S. News & World Report* survey of the best children's hospitals in the US, Cincinnati Children's ranked number three.

Cincinnati Children's has not, however, always been an exemplary hospital. In 2001, below-average clinical outcomes for patients with cystic fibrosis prompted the hospital to improve healthcare delivery not only for these patients, but for every other patient coming into the hospital. An explicit strategy that integrated engagement, improvement, innovation and research was developed to support this far-reaching aim to transform healthcare delivery. The below-average outcomes were shared with patients, families and care providers, and the Quality Improvement Steering Committee – with parental and hospital leadership – was established. The Family Advisory Council (FAC) was also established in 2001 and continues to play an important role in the hospital's decision-making process. What followed were a series of changes and improvements throughout 2001–2007 (Siracusa et al. 2014). They included restructuring of data-management support to provide real-time clinical data to monitor progress; replacing of weekly chart conferences with prospective planning sessions and individualized daily schedules for inpatients; redesigning and implementing of best-practice and evidence-based clinical algorithms; and adding key care-team members.

These improvements would not have been possible without the Anderson Center for Health Systems Excellence, which continues to serve as the catalyst for transformation across Cincinnati Children's (CCHMC n.d. a). One of the Anderson Center's key roles is to provide leadership, content expertise, research and infrastructure support for strategic areas such as safety, capacity management, chronic diseases (notably cystic fibrosis and inflammatory bowel disease [IBD]) and community/population health (CCHMC n.d. b).

Patient Engagement

Driving improvement efforts at Cincinnati Children's is the belief that involving families with their care teams will provide the best possible outcomes for children. This belief is closely connected to the understanding that parents and family members are a child's main and constant source of strength and support. The hospital and care providers welcome help from families and patients to improve the way care is provided for patients. This allows the hospital to be transparent, to collaborate and to dedicate itself to finding the best care approaches. Family-centred care is truly embraced at Cincinnati Children's. Care providers collaborate with families on many levels, including in the development of evidence-based care recommendations. More than 100 care recommendations have been developed to date and are freely available for anyone to review.

The organization has brought together three key elements that help it learn through ongoing experimentation and by testing different approaches to patient and family engagement: patient and family involvement at all levels, with an emphasis on patient and family experience and staff experience; integration of a scientific approach to improvement, research, innovation and user-centred design; and a sophisticated understanding of what is needed to support this work.

Patient and family involvement at all levels, with an emphasis on patient and family experience and staff experience

Cincinnati Children's offers families and patients an opportunity to contribute to care by becoming volunteer advisors. Two main structures have been established to support this participation: the FAC and the Patient Advisory Council (PAC). The FAC provides input from the family perspective and meets monthly from September to June to discuss and address hospital-wide concerns. The PAC gives patients a voice in the decisions that influence the care they receive. PAC members support current patients, advocate on behalf of patients and help staff see the hospital and care from the pediatric patient perspective. In addition, there are other types of advisory councils, both organization-level and some unit- or program-based, depending on the size of the unit and patient population. For example, the Neonatal Intensive Care Unit has its own family advisory board that meets every week. Recently, Cincinnati Children's established a Patient and Family Experience Council and appointed a physician as the patient and family experience officer.

Everybody's experience counts at the Cincinnati Children's, including that of its own staff. As one nurse put it, "everyone here works very hard to resolve issues and take care of what's most important ... kids. I have to say as an employee that if you have even the smallest need, ... let someone know. We will do everything possible to accommodate that need!" Dr. Patricia Chambers, an emergency medicine physician, reported that "the key to our success is staff engagement" (Wolf 2014).

Integration of a scientific approach to improvement, research, innovation and user-centred design

Cincinnati Children's supports a culture of improvement through collaboration and sharing that ensures efforts are coordinated and aligned among units and staff. This includes a series of unit bedside huddles held three times daily, and an organization-wide briefing at which all 18 of the key operational areas come together daily at 8:35 a.m. to identify and address critical items. These meetings ensure greater awareness of potential clinical issues, and serve to identify patients requiring additional attention, thus helping to ensure the best care experience for all and a continuous focus on ongoing improvement.

Beyond the hospital's walls, in 2004, Cincinnati Children's began collaborating with eight other pediatric centres across the US to build an innovative approach to improving care for children with IBD (Kappelman et al. 2008).

An IBD improvement network was formed, and several years later it was expanded and transformed into what is known today as the Collaborative Chronic Care Network (C3N) Project, an innovative platform that brings together patients, parents, clinicians and

researchers to co-design better ways to manage health and healthcare (C3N n.d.) The C3N Project is now housed at the hospital. (See the C3N case study in this collection.)

Cincinnati Children’s has applied the principles of user-centred design for many years, involving patients and families from the earliest stages of facilities planning through to post-implementation assessment. For program and facilities redesign, parents and patients participate in short-term focus groups and act as advisors embedded in design teams. Although there can be differences of opinion between families and staff, the vice-president of infrastructure and operations observed, “Most times the compromise will come because families will say, ‘Well, we care about the caregiver experience as well and we don’t want to create something that’s going to make work or create maybe operational inefficiency just for the sake of our perceived need.’ By having that dialogue it tends to work to a sufficient compromise.”

Recently, Cincinnati Children’s built on the notion of “designing an experience that is value-added” by exploring the application of design-thinking concepts borrowed from the consumer products industry. This approach blends design-thinking methodology with quality improvement and an expanded interpretation of patient and family experience. When compared to more traditional quality improvement and design methods, the key difference is the degree of effort at the initial stage, which enables an in-depth exploration of users’ experience and needs.

Families are also engaged in safety initiatives at Cincinnati Children’s. One senior leader noted, “We’ve made huge investments in family involvement and safety. So, in our safety oversight group for example, we have three parents there and they are hearing in a very transparent way when a serious safety event occurs and a root cause analysis process occurs. They are involved in hearing every aspect of what went wrong and what we are recommending needs to be changed.”

Sophisticated understanding of what is needed to support this ongoing experimentation and tests of different approaches to patient and family engagement

In order to offer staff training in quality improvement, Cincinnati Children’s has developed an in-house educational program called the Intermediate Improvement Science Series (I2S2). Participants learn through reading and course sessions, and each participant – mentored by a Cincinnati Children’s leader – designs and conducts an improvement project. More broadly, there is an expectation that all hospital units will apply the science of improvement to transform their processes and develop internal experts to make improvement and spread ideas in their work units (Tucker and Edmondson 2011). The Anderson Center, a hub of organizational learning, provides the infrastructure to support engagement and improvement based on redesign and innovation. The concept

of “a high-reliability organization” and establishment of an operational excellence framework are the two crucial elements of this infrastructure, supporting both experimentation and testing. The high-reliability process provides a structure for issue identification and mitigation that touches on safety, quality and service of and for patients, families and staff, as well as all other aspects of supporting patients’ care and experience.

At Cincinnati Children’s, every effort is made to connect experience with safety. Staff members are encouraged to see that lapses in service quality are perceived as lapses in safety by patients and their families. The framework for operational excellence links safety, improvement, patient and employee experience, and is facilitated by a partnership with patients and families. This partnership is supported by accountability to leadership, resilient staffing and a continuous effort to ensure situational awareness and risk management through daily briefings and unit huddles.

Impact

Cincinnati Children’s began its improvement journey in 2001 and has since documented better patient outcomes and family experiences, a dramatic reduction in hospital-acquired infections, more reliable systems for delivering care safely, greater efficiency and timeliness, better management of hospital resources and significant savings to the healthcare delivery system (CCHMC n.d. c).

The PAC has worked to create new communication tools (e.g., “All About Me” posters for patient rooms that help patients share information about themselves with staff, tools for patients who are unable to speak). Patients and family members are involved in shaping education materials (e.g., revised information brochures for patients and children), and they take part in the education and training of clinicians, including by making presentations about “The Patient’s Experience” at the Cincinnati’s Residents’ Noon Conferences. For their part, meanwhile, FAC members have influenced the design of new services and new buildings, and they are regularly involved with processes and plans to improve the quality and accuracy of care provided.

Summary

Cincinnati Children’s is a leader in engaging patients and families in many aspects of the organization, including the redesign of patient care. Patient engagement at the hospital is closely integrated with improvement, innovation and research. The organization has worked to enhance a culture of transparency; to create broad collaborations among providers and patients; and to stay focused on finding effective approaches to care. These efforts, combined with organization- and unit-level roles for patients and family members in decisions, help to maintain the hospital’s commitment to delivering the best care for all.

This case study is based on research carried out in 2014. The case is informed by additional research conducted in 2015 and was edited in 2015 as part of research commissioned by the Federal Advisory Panel for Healthcare Innovation to inform their report: *Unleashing Innovation: Excellent Healthcare for Canada* (<http://www.healthycanadians.gc.ca/publications/health-system-systeme-sante/report-healthcare-innovation-rapport-soins/index-eng.php>).

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