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Emily Kagan Trenchard
Northwell Health

Laura Semlies
Northwell Health

Sven Gierlinger
Northwell Health

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The digital revolution will see you now: transforming patient experience in the digital era

Emily Kagan Trenchard, *Northwell Health, ekagan2@northwell.edu*
Laura Semlies, *Northwell Health, lsemlies@northwell.edu*
Sven Gierlinger, *Northwell Health, sgierlinger@northwell.edu*

Abstract

Industry after industry has reinvented itself in response to upstart challengers and shifting consumer expectations that are the hallmarks of this new era. The same is true in healthcare, where we have weathered the introduction of the electronic medical records, patient portals and now interoperability. But to date our industry's digital transformation has been guided largely by government regulation – leaving the design of the future of healthcare to be driven by policy makers and executed largely by IT departments. Meanwhile, most other industries have turned to a different guru for inspiration and guidance: the consumer. Northwell Health has undertaken a cultural transformation grounded in patient and family centered care. In this narrative, we explore our digital patient experience (dPx) journey and lessons learned. Every person, every role, every moment matters.

Keywords

Digital patient experience, consumerism, patient experience

Introduction

It is almost a cliché at this point to say that digital technology has changed the way we live our lives. Industry after industry has been forced to reinvent itself in response to upstart challengers and shifting consumer expectations that are the hallmarks of this new era. The same is true in healthcare, where we have weathered the introduction of electronic medical records, patient portals and now interoperability. To date, our industry's digital transformation has been guided largely by government regulation – leaving the design of the future of healthcare to be driven by policy makers and executed largely by IT departments. Meanwhile, most other industries have turned to a different guru for inspiration and guidance: the consumer.

New tech companies obsessed with customer service and convenience regularly surprise and delight us with on-demand, personalized services[1-2], which have transformed every aspect of our lives. The first iPhone was released in 2007, but somehow, we cannot imagine life before Amazon or Uber. From banking to airlines, retail to hospitality, such industries have transformed themselves to put more control in the hands of consumers, quite literally, through smartphones. With the growth of this digital empowerment, as well as the shift from paternalistic medicine to a paradigm of partnership between providers and patients[3], people now expect a degree of control and digital convenience from healthcare on par with what they

experience everywhere. A 2016 McKinsey Consumer Health Insights Survey found that, "an overwhelming majority of [consumers] made it clear that they want digital solutions at each step in their healthcare journey[4]." So how do we care for patients in a digital world? The needs are clear, the ways to meet them are less so.

Customer-obsession as an Organizational Strategy

Northwell Health, a large integrated healthcare system throughout New York State with 69,000+ employees, 23 hospitals and over 750 physician practices, decided to begin its own digital transformation by taking a page from the book of industries who had successfully made the leap - starting its own journey to customer obsession.

Senior leadership set three important guidelines which would prove critical to the success of the program. First, the program would prioritize its work around solving the most important issues as identified by our patients and their family members. While there were many exciting and worthwhile things staff wanted to focus on, the patients would guide our work. Second, it was decided that we would not let perfect be the enemy of good – we would build products and features incrementally and release them as soon and as often as possible. This would allow us to get the solutions in the hands of patients quickly, obtain feedback and make improvements. Finally, it was decided that this would be a company-wide initiative, not owned

by any one division. Customer-obsession needed to be in the bones of every part of the organization, and digital transformation needs to be everyone's job. From these principles, the Digital Patient Experience program (dPx) was born.

To identify our first areas of focus, dPx turned to patient experience data to help identify the biggest pain points. Like many large organizations that grow by means of mergers and acquisitions, there were a patchwork of digital tools and services intended to help patients navigate the system and manage their care. However, these efforts were fragmented and most stemmed from the needs of individual departments. Our patient and family community bore the consequence of this fragmentation and they resoundingly voiced their frustration with complicated bills, scheduling challenges and the need to fill out forms over and over again within Northwell.

Looking to solve for these challenges in a holistic way, the dPx team decided to focus its attention on ways these issues were manifested in the outpatient experience. This approach – of looking at a single care experience from every angle – we call 360° experience design. By concentrating first on the ambulatory experience, we were able to launch multiple new products and features in a way that did not feel disjointed or piecemeal but contributed to a transformed experience.

The next challenge was to determine what skillsets we needed on the teams. It was clear from the start that our consumers made little distinction between their online and offline experiences, so our goal was to continue to blur that distinction. Digital life is real life, so if we were to be successful, we would need to create digitally empowered experiences that supported not only our patients, but also our staff facilitating in-person and over the phone interactions. We assembled teams of clinician and office staff, designers and developers, business analysts, and scram masters, strategists and writers, to help build our first set of products.

Once we decided to focus on the ambulatory world, we identified five key patient challenges around which we organize our work and our team structure. Identity – solving the patient complaint that "You never remember who I am"; Access – solving for the challenge of getting appointments with the right doctor at a convenient time; Financial Health – addressing the frustrating and confusing nature of healthcare payments; Support – revamping our approach to customer service; and Platform – creating the websites and mobile app to allow patients a single, seamless point of access to our product suite. We name our teams around the problems for which we are trying to solve, as opposed to the vendor or product being utilizing. Remaining mission-driven instead of randomly plugging in technology solutions, helps the

program maintain deep connection to our higher purpose – caring for patients and families.

Designing our Digital Destiny

"My brother has major billing issues and I have requested they submit the bill to his new insurance on four different occasions. Trying to pay for his hospital stay and follow-up doctor appointments and everything is disconnected. I have to provide his insurance information over and over again. This should be easier." – Frustrated Patient Caregiver via Social Media

Billing and the revenue cycle is an absolutely distinctive episode within the continuum of care. Extremely personal and potentially disruptive to the whole of your financial wellbeing, the billing experience quickly took center-stage during our patient and family focus groups and interviews. Green et al (2012) discuss the importance of creating a "comprehensive, integrative, consistent approach to making patient-centered care a *system property*" since factors impacting patient's experience do not exist in isolation[5]. Knowing that the billing process was the number one source of frustration for our patients, it was a natural place to start for dPx.

Our approach was founded on the belief that the problem of paying for things online was well-worn territory for retail and that we should look first to match what consumers were already used to having at their fingertips: a place to see all their outstanding charges, pay for them with a credit card that they can keep on file, and setup payment plans to better help them manage their responsibility. We stood up an online payment portal that would consolidate bills from across the health system, and connected it to our new Northwell online account. This single login would allow patient to access not only the payment portal, but all the other products and features that were to follow. Since launching in the summer of 2018, the portal has collected over $40M in revenue for the health system. Our next focus will be to expand the notion of financial health to include advance tooling for price estimate, financial education and high-quality customer service to ensure a great clinical experience is never marred by the stress of paying for it.

"As a healthy 75 year old man, I get my yearly physical like clockwork. However, I was worried today when I was told to follow-up with a Cardiologist because my EKG was not normal. I immediately went on my tablet and found a number online to call. The agent was lovely, kind and patient and she made me an appointment to see a local Cardiologist that same afternoon. I was blown away! I was then able to go online to see the Cardiologist's ratings and comments from other patients and that's when I knew I was in good hands." – Grateful Patient

After tackling some of the billing challenges, we knew we had to take a hard look at the ways patients scheduled

appointments with us. While we have call centers that operate during normal business hours, tools like ZocDoc had made it possible for patients to skip the call all together and book directly into a doctor's schedule any time of day. But scheduling goes beyond just the making of an appointment. In the International Journal for Equity in Health, Levesque, Harris and Russell have proposed a conceptualization of access to healthcare as "the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use health care services and to actually have the need for services filled[6]." So we wanted to be sure that any scheduling tools we implemented were deeply entwined with the patient profile, the clinical pathways that patient might be on, and ultimately able to anticipate care needs.

As we looked at the landscape of possible scheduling tools, most of them would have required that we outsource core parts of our infrastructure, such as our scheduling systems and patient profiles, to the third party who would do the booking. That was a non-starter for the dPx program. The way people access care from our providers was at the heart of our business and if we were going to be successful we would need to retain control over these key parts of the experience and build on work we had already done to standardize our scheduling applications. After looking more closely at what our existing tools had, we realized that we could build our own solution in house to get the most immediate value to patients and providers alike.

Our human-centered design approach was not just limited to soliciting the opinions of patients. We worked very closely with physicians and office staff, as well as our call center agents, to understand what they would need for a digital scheduling tool to be successful. What we uncovered was a number of historical practices that were keeping our schedules from aligning with patient needs - from the hours that the offices were open, to beliefs about autonomy and control. Our physician leadership have been indispensable in helping us change the culture. In partnership with our Patient Access Services team they create a score card for each practice to help them take a look at their own "readiness" for online booking. This effort sets the cadence for how we bring online booking to our practices and ultimately to our patients.

"One particular evening my husband and I made a late night visit to see mom. We sat quietly with her and just wanted to spend some time with her before heading back to our hotel. After being there for a short period of time we were greeted by a nurse named Natalia. She was about to begin mom's peg tube feeding and she allowed us to stay. Within a very brief period of time I could see that Natalia was different, special! She was so gentle and caring and I felt an instant sigh of relief knowing she was in such good hands. When we went to leave, I leaned over to turn out mom's light. Mom jumped and said "please leave the light on". Natalia overheard and said "Oh no,

Margaret does not like to be in the dark, she likes her light to always be on. She also does not like to be alone, so when I am done making my rounds I bring my computer in front of her door and do my charting there so she does not feel alone" .... Wow, she knew mom after taking care of her for just a few days and anticipated her emotional needs. That I believe comes from a place of genuine caring and compassion. I also liked that she addressed mom by her by her first name. I feel this makes a patient feel more like a person and not just another patient." – Grateful Patient's Daughter via Written Letter

The 2018 Consumer Report from The Beryl Institute found that, "consumers, as reflected in being identified over 60% of the time on average, want to be connected to the experience they have and be acknowledged for the person they are, not just a thing to be treated[7]." At Northwell, we have been on a remarkable cultural transformation grounded in the tenants of Connectedness, Awareness, Respect and Empathy (C.A.R.E.) over the past few years. By reigniting our team member's passion for healthcare, we are dedicated to providing humanistic, empathetic quality care. Our patients were resoundingly telling us they wanted their care team to "remember me," "know me," "see me for who I am – a person."

A key insight for us was to take the principles of C.A.R.E. and apply them to the tools and processes we were building. Taking those human elements to technology, we knew we needed to create an institutional memory – one that was informed collaboratively with our patients and captures important information about the patient like those mentioned in the letter above. Alongside a strategic vendor, Docent Health, we create patient profiles, capturing preferences, likes, dislikes, past experience triumphs and failures so that future interactions and encounters are informed, sensitive and person-centered. This holistic view of the patient will then be integrated into existing workflows for front desk staff, call center agents, and providers alike. Our goal is to ensure that the person is always visible within the medical record number, or diagnosis code.

Keeping with our mission to ensure that our patients feel recognized and remembered, we've also implemented a program to change the way we approach patient identification. Like most large health systems, managing a person's identity across numerous touchpoints can be daunting. By employing high-resolution photographs at the front desk, we can use deep facial recognition and the signature pattern of their iris to create a biometrics ID that is more accurate than fingerprint[8]. This photo is then added to the medical record as research shown this practice to reduce medical errors[9]. To date more than 30,000 patients have been identified at our front desks with nothing but a smile.

Reflection & Lessons Learned

Though our journey has only just begun, we're confident in our belief that our patients are our north star. Frequent testing with users and focus groups have allowed us to learn and course correct at many points along the way. This continuous feedback loop has allowed us to avoid costly mistakes by ensuring that patients give us early feedback on designs. It's also becoming clear that the technology is actually the easy part. The real work in a digital transformation comes when you put the tools in the hands of the people you're looking to serve. Retooling how we operate to better serve our patients takes a degree of institutional bravery. There are difficult conversations to be had about where we invest limited time and resources. To that end, having the strong backing of the organization's leadership has been an invaluable part of our success so far. The Northwell brand is rooted in innovation, and ultimately the dPx program seeks to be the launchpad and rocket fuel for many, many more products to come. With the head-spinning pace of digital progress, our work in this space will never truly be done. We'll keep looking to our team, our families and our communities for our direction, and let the technology follow.

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