

DIGITAL INNOVATION & CONSUMER EXPERIENCE



J Jefferson
HOME OF SIDNEY KIMMEL MEDICAL COLLEGE

DIGITAL INNOVATION & CONSUMER EXPERIENCE



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at Thomas Jefferson University and Jefferson Health

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Jefferson
THE SIDNEY KIMMEL MEDICAL COLLEGE

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01



OUR STORY

WE ADDRESS KEY PROBLEMS IN HEALTHCARE AND EDUCATION AND BRING DIGITAL TO LIFE

The Digital Innovation and Consumer Experience (DICE) Group was founded in 2014 to create innovative products, services and business models for Thomas Jefferson University and Jefferson Health. Since then, we've delivered on this goal by

positioning Jefferson as a consumer-focused, digital-ready and innovative organization, improving the lives of millions of patients and thousands of students each year.

WE ARE PASSIONATE ABOUT WHAT WE DO

The DICE Group is transforming healthcare by developing and implementing valuable digital solutions. We leverage an agile methodology, human-centered design principles and digital platforms to lead the next generation of

healthcare organizations. As we continue to grow, our forward-thinking approach enables us to build innovative, engaging products that improve lives.



VALUES

02



DELIVERING RESULTS

OUR WORK COUNTS

DICE aids all of Jefferson by building products that save time, streamline operations and improve processes. Through licensing agreements, consulting and co-development relationships, our products are starting to make an impact at other organizations. These partnerships enable us to create solutions that address key issues in healthcare and education at global and local levels.

 **130+**
PROJECTS
PER YEAR

 **30+**
MARKET-READY
SOLUTIONS

 **10x**
RETURNS ON
MOST SOLUTIONS

 **10K+**
PHYSICIAN HOURS
SAVED BY ONLINE
TRAINING

OUR DEPARTMENT'S NUMBERS

150+
PEOPLE
WORKING AS ONE

30+
PARTNERS

 **\$7.5M**
SAVED BY STAFF
ONLINE TRAINING

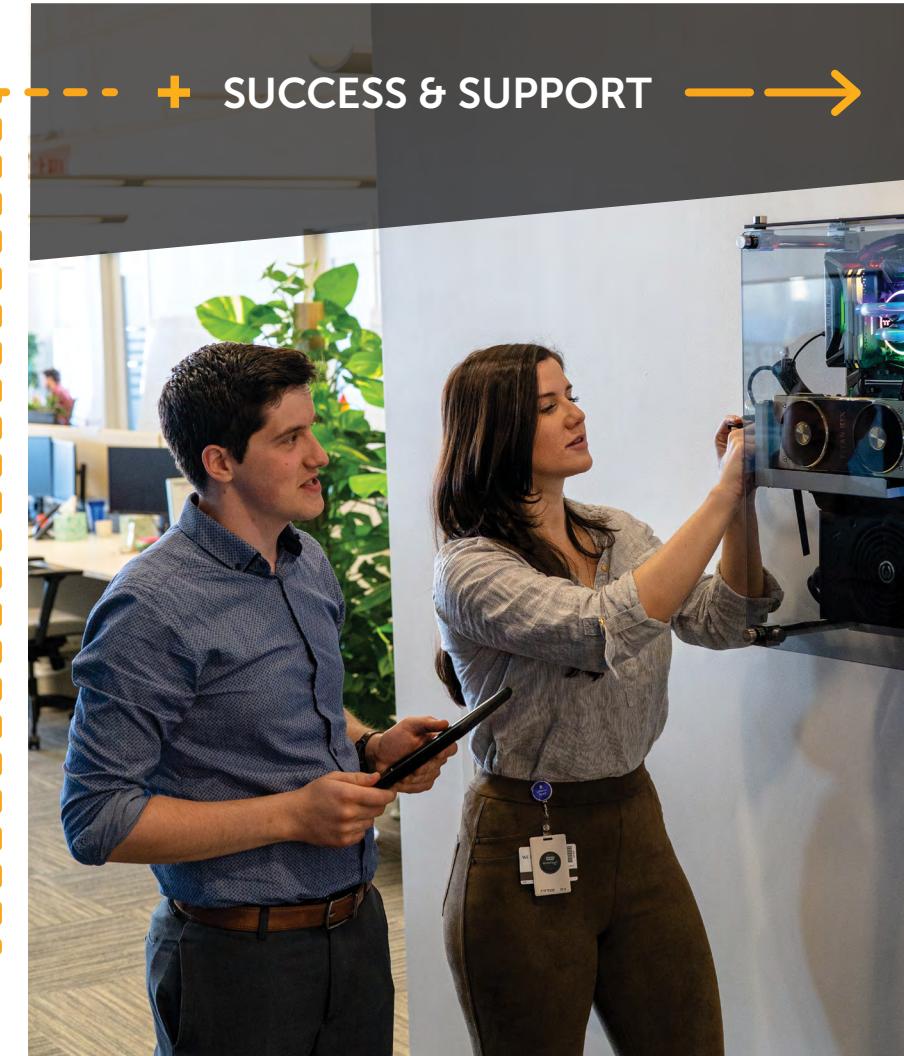
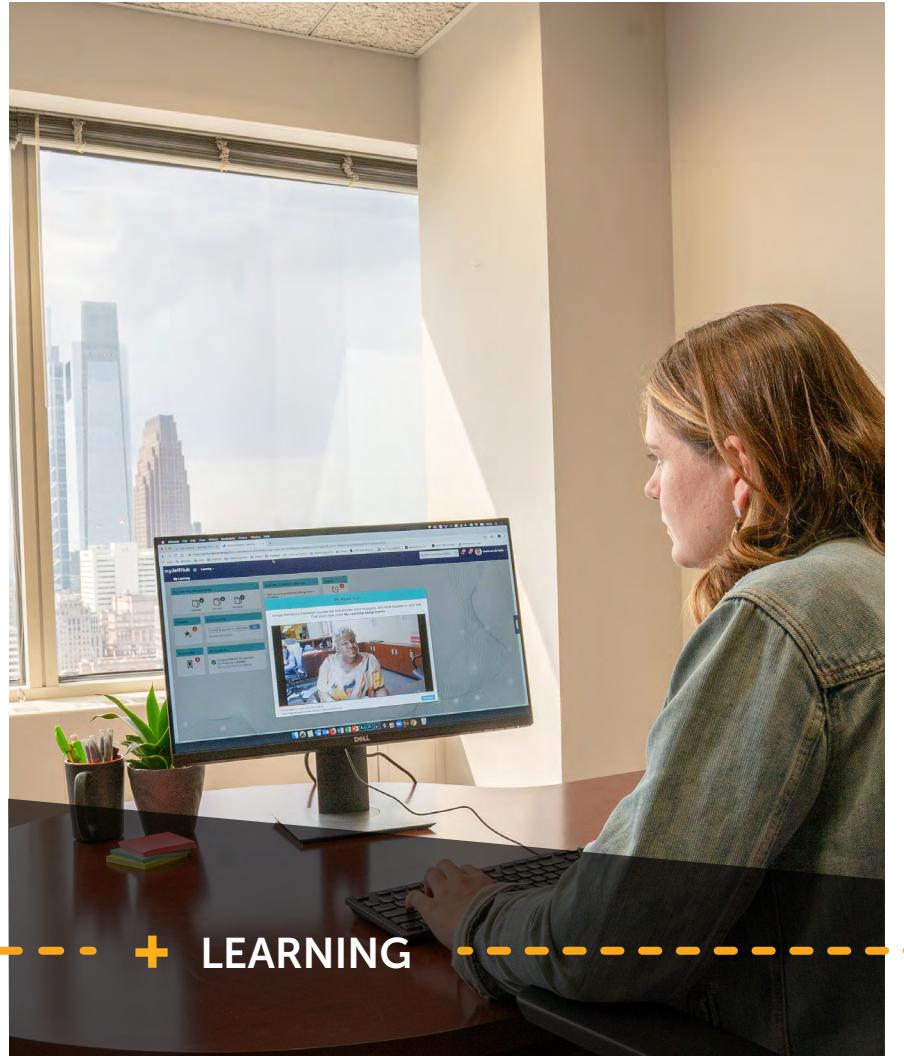
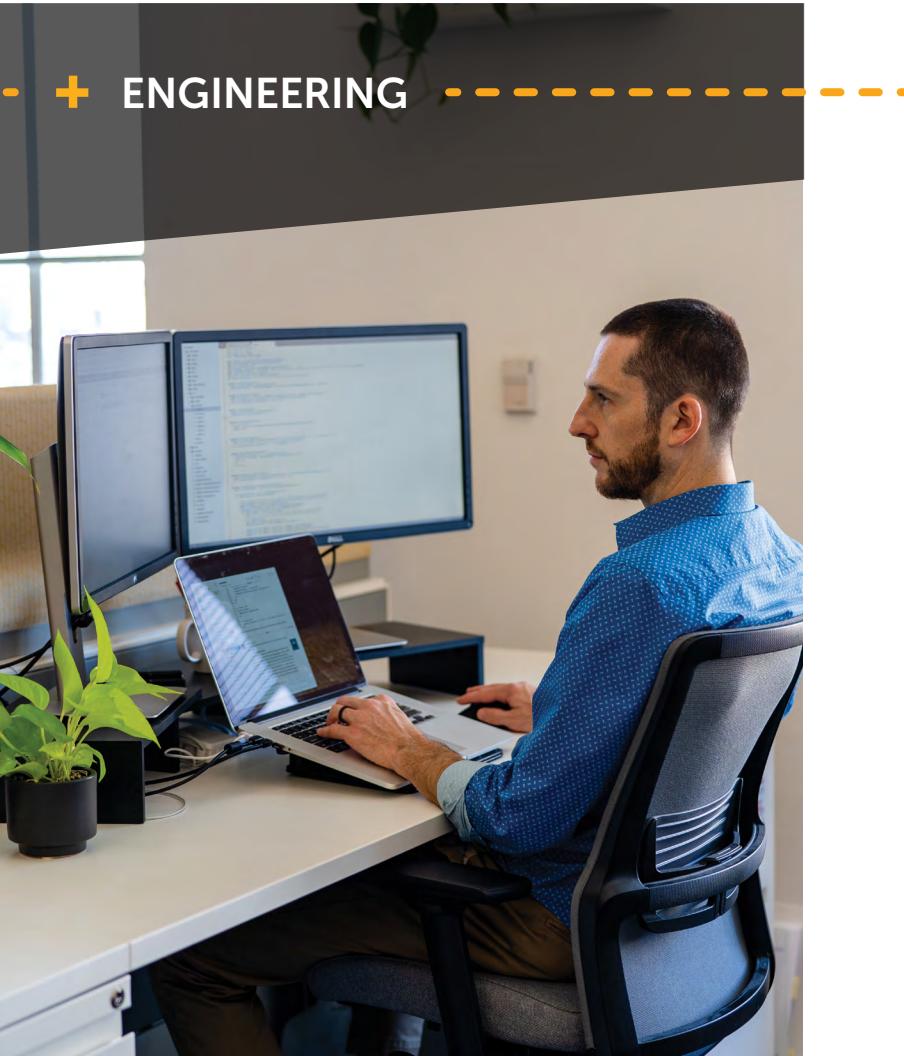
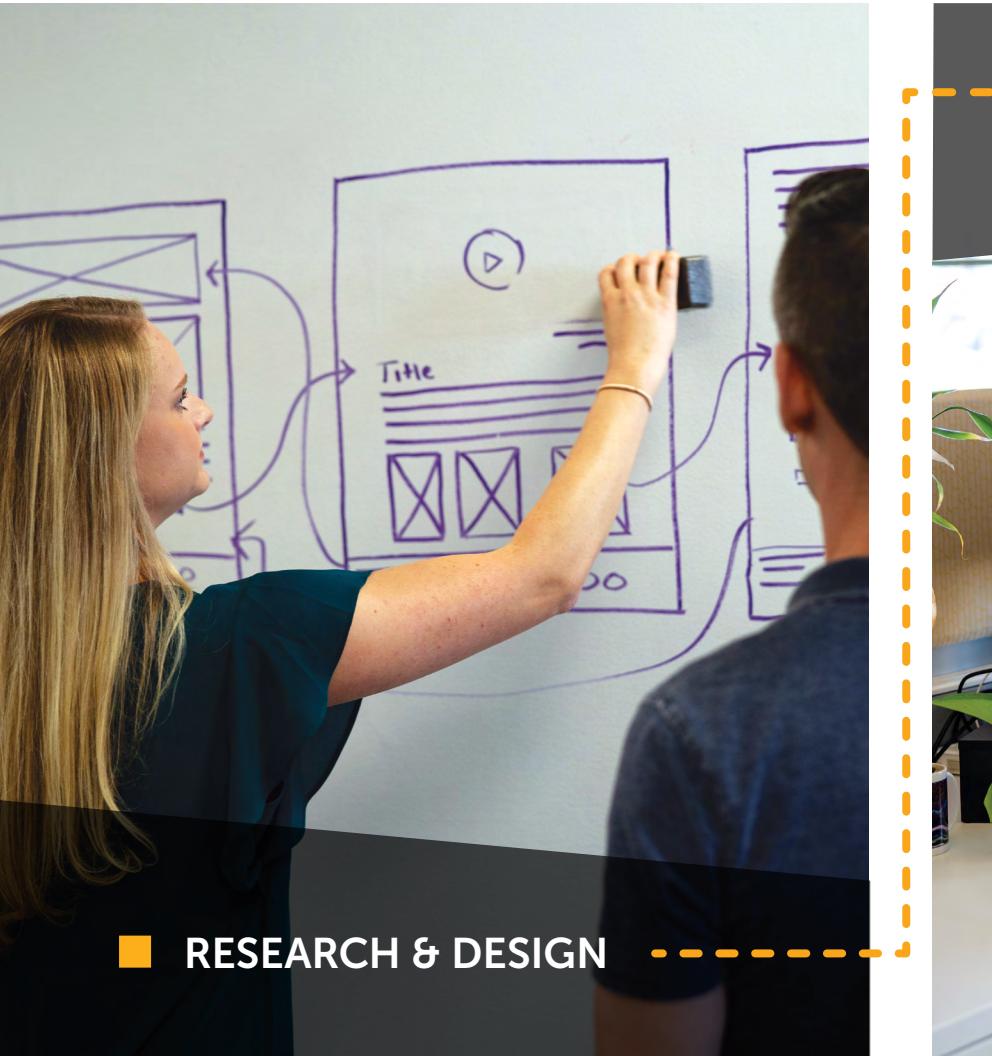
 **\$2M**
FUND-RAISED VIA
DONATION APP



EXPERTISE

03

OUR CORE COMPETENCIES





EXPERTISE



CREATING
NEW KNOWLEDGE

RESEARCH

PROVIDING CONTEXT AND INSIGHT

As Neil Armstrong said, *“Research is creating new knowledge.”* He, along with his fellow astronauts, conducted pathbreaking and innovative research in space that inspired millions to pursue space exploration as a profession. And with digital transformation on the

rise in healthcare and education, it is very important for our organizations to invest in research teams that not only identify gaps in consumer experience, but also help improve workflow and operational issues.



SUBJECT
EXAMINATION



DATA
ANALYSIS



CONCEPT
GENERATION

THE PROCESS

At DICE, research is the first step and foundation of our process. The Experience Design team works with our clients, and The DICE Group’s Engineering and Learning teams to shape project narratives, gather and interpret data, and investigate end users and their needs. The context and insight they provide help uncover areas for improvement that lead to ideas and recommendations. These ideas become meaningful, implementable solutions that improve lives.

THE TEAM

- Design strategists
- User experience researchers
- Process designers
- Human-centered designers



EXPERTISE



DESIGNING FOR THE FUTURE

DESIGN

IS HOW IT WORKS

With a growing focus on consumer experience, healthcare and education organizations are embracing human-centered design to help deliver enhanced and focused customer experiences and patient care. Our Design team partners with clients at Jefferson and beyond to bring our vision of reimaged healthcare and education to life. One of The DICE Group's 12

principles is Steve Jobs' statement that "Design is how it works." We deliver on this principle by ensuring that design is at the heart of all we do, helping us validate problems, conceptualize solutions and decipher measurable outcomes that then help all our teams and the organizations we work with to develop experiences, solutions and business models that truly transform.



VALIDATE
PROBLEMS



CONCEPTUALIZE
SOLUTIONS



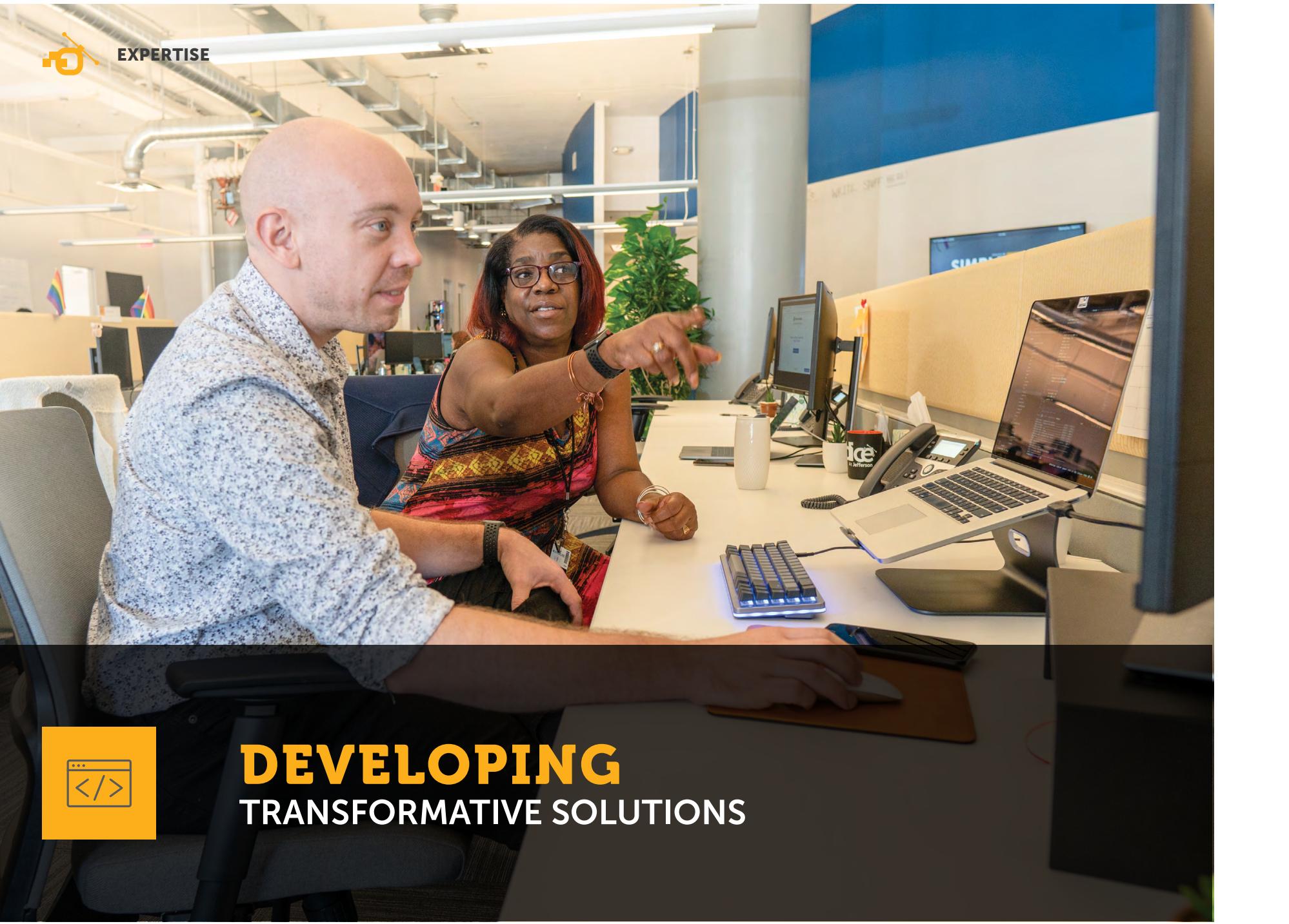
MEASURE
OUTCOMES

THE PROCESS

As Paul Rand said, "The designer does not, as a rule, begin with some preconceived idea. Rather, the idea is (or should be) the result of careful study and observation, and the design a product of that idea." The Design team embraces this ideal to serve our organization and our partners objectively.

THE TEAM

- User interface designers
- Communication designers
- Multimedia designers
- Print designers
- Product designers



EXPERTISE



DEVELOPING
TRANSFORMATIVE SOLUTIONS

ENGINEERING

MAKING THE IMPOSSIBLE... POSSIBLE

The Engineering teams at The DICE Group consist of technical experts focused on the common goal of building innovative and transformative technology to solve real-world problems in healthcare and education. Their collective knowledge base and skill sets include the inner workings of software, digital processes and physical devices.

TECHNICAL EXPERTISE

- Front end development
- Back end development
- Clinical systems development (EHRs)
- HL7, FHIR, interfaces
- Real-time data visualization
- Web applications
- Building & implementing APIs
- Native & mobile apps
- IoT hardware interfacing & development
- 3D printing
- Artificial intelligence & machine learning

Marcus Aurelius once said, "The impediment to action advances action. What stands in the way becomes the way." This forms one of The DICE Group's 12 principles and is especially embraced by the Engineering teams to develop solutions where none seemed accessible and bring innovative ideas to life.

THE TEAM



CONSUMER SOLUTIONS

- Web development
- App development



OPERATIONAL SOLUTIONS

- Portals & platforms
- Clinical solutions



APIs & INFRASTRUCTURE

- API development
- IoT, AI & ML solutions



EXPERTISE



LEARNING

PREPARING FOR THE FUTURE OF WORK

As work becomes driven by just-in-time insights delivered via machine learning and supported by digital platforms, corporate and academic training must prepare us and provide learning contextually at the point of decision-making. Our Learning team designs for this future.



80%

TRAINING DELIVERED
ONLINE



\$9M+

SAVED IN TRAINING
COSTS SINCE 2016



58%

REDUCTION IN TIME
SPENT IN TRAINING

THE PROCESS

We support key initiatives with comprehensive, immersive learning experiences that have contributed to smooth implementations of large ERP systems (PeopleSoft) and EHR systems (Epic). We develop academic curriculum for online courses, support learning management systems (LMSs), and facilitate corporate and compliance training. Our custom documentation provides targeted and ongoing end user support. Our products and services are used enterprise-wide and externally to help reduce costs, enable rapid learning and prepare employees, students and learners for success.

DOCUMENTATION SERVICES

- Resolve technical issues quickly with user-friendly documentation
- Improve job performance by serving employees just-in-time support
- Enhance patient care by providing comprehensive clinical application and EHR documentation



SUCCESS

DELIVERING STRATEGIES & SUPPORT

Our Success Management, AV Solutions and Services, and Robotic Process Automation (RPA) teams build strategies for the successful deployment and support of The DICE Group's solutions. They connect our hospital patients to the organization and call codes, install and

manage AV and Video Conferencing solutions, and build custom RPA and Business Process Management (BPM) solutions that connect disparate systems and solve key operational problems. Their work allows everyone to fully leverage our technology's potential.

OUR EXPERTISE

- Customer relations & support
- Client success management
- Product management
- Hospital contact center services
- AV solution research, design & deployment
- Advanced video conferencing platform deployment
- RPA solution architecture & development
- BPM solution architecture & development

THE TEAM



SUCCESS MANAGEMENT

- Client relations & support
- Product management & implementation



AV SOLUTIONS & SERVICES

- Hardware installation
- Front line AV support
- Video conferencing solutions



RPA & BPM SOLUTIONS

- Custom solution architecture & development
- ServiceNow platform development & support



CUSTOMER-FOCUSED CONTACT CENTER

SUPPORT

KEEPING JEFFERSON CONNECTED

Operators in the DICE Contact Center are the voice of calm in moments of chaos, as they page on-call staff, execute overhead announcements, and activate 10,000+ emergency codes annually that initiate life-saving protocols.

24/7

— AROUND-THE-CLOCK
CUSTOMER SUPPORT

10K+

— EMERGENCY CODES
INITIATED ANNUALLY



2M+

— PHONE CALLS
RECEIVED PER YEAR

THE PROCESS

As ambassadors to the Jefferson community, these team members provide information, directions and emergency communications 24 hours a day, 7 days a week, 365 days a year.

Their deep knowledge of policies and protocols used throughout the enterprise helps them assess a situation and deliver critical information to doctors, staff and other facilities.

SERVING

- Abington – Jefferson Health
- Abington – Lansdale Hospital Jefferson Health
- Jefferson Bucks Hospital
- Jefferson Frankford Hospital
- Jefferson Hospital for Neuroscience
- Jefferson Methodist Hospital
- Jefferson Torresdale Hospital
- Thomas Jefferson University Hospital



MOBILE APPLICATION

04

PRODUCT OVERVIEW

The path to better health can be confusing. We redesigned our HIPAA-compliant myJeffHealth clinical app to help patients navigate the hospital system with ease.



PATIENT-FOCUSED

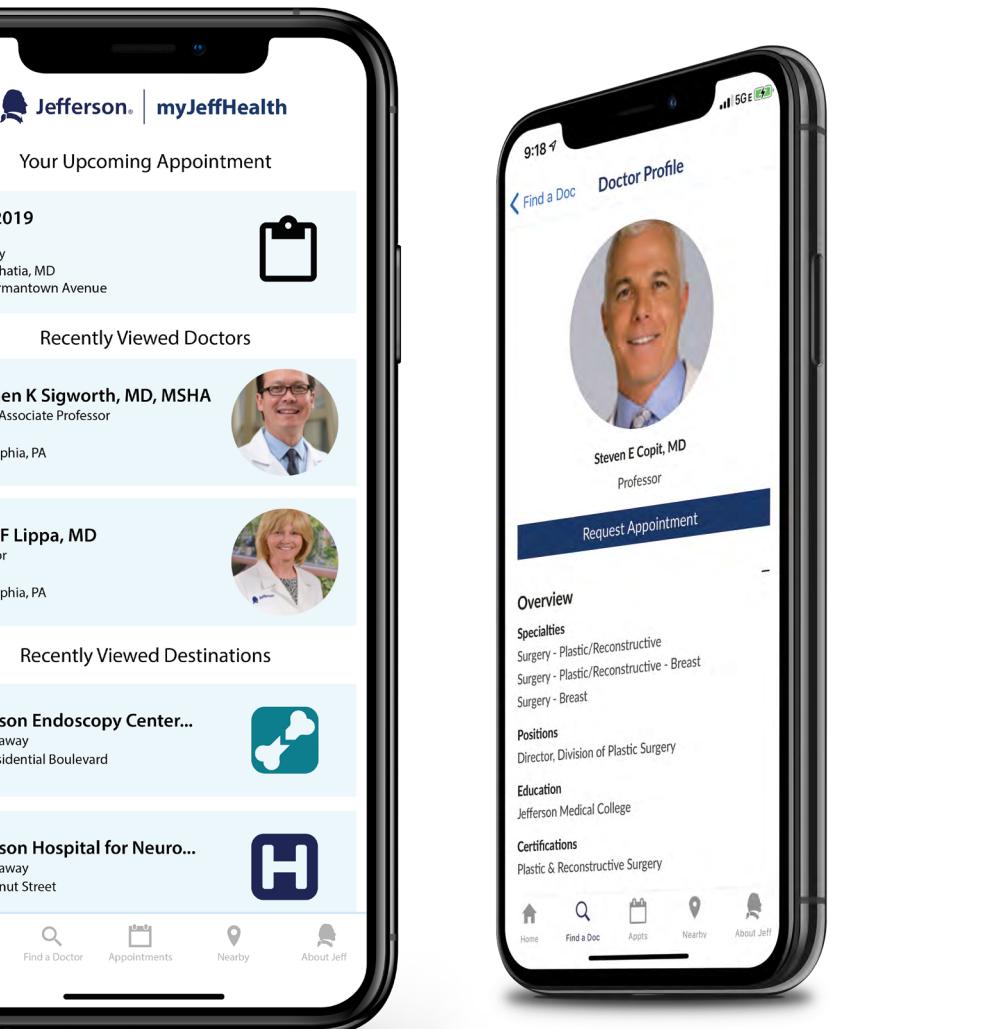


FLEXIBLE FRAMEWORK



USER-FRIENDLY DESIGN

myJeffHealth REDEFINING THE PATIENT JOURNEY

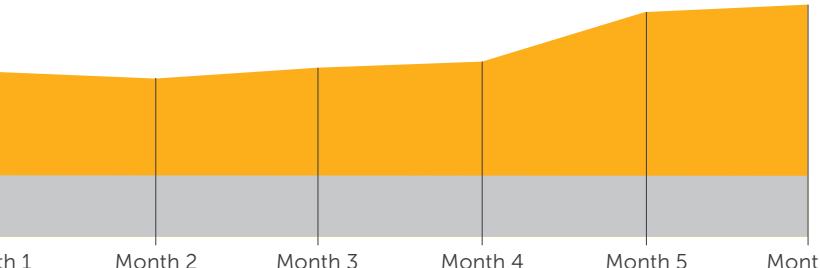


SCHEDULE APPOINTMENTS SEAMLESSLY

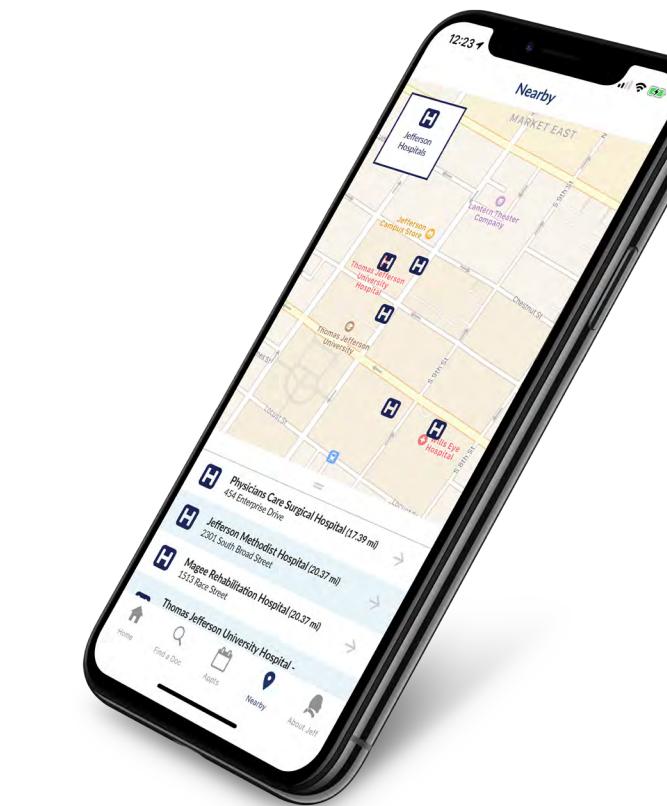
myJeffHealth presents a redesigned appointment viewing and scheduling experience and connects with Epic MyChart. It also helps patients plan their visit with information on physicians, clinical service locations, parking, directions and restaurants. Patients can even access the Jefferson Shuttle map.

Pre-Launch Average

Post-Launch



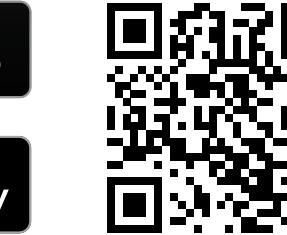
Average monthly downloads for myJeffHealth increased by 74% six months after the redesigned app launched.



OUR SOLUTION

Download on the
App Store

GET IT ON
Google Play



MONTHLY ACTIVE USERS (iOS AND ANDROID)

Pre-Launch Average

Post-Launch



The redesigned app's monthly active users increased 244%.



TELEHEALTH APP

ffConnect

TRANSFORMING PATIENT CARE EVERYWHERE

PRODUCT OVERVIEW

JeffConnect is a telemedicine program that enables patients to virtually meet with doctors anytime, from anywhere and from any device.

THE CHALLENGE

Physician shortages, scheduling conflicts or a lack of access to transportation can create barriers to receiving healthcare.

► OUR SOLUTION

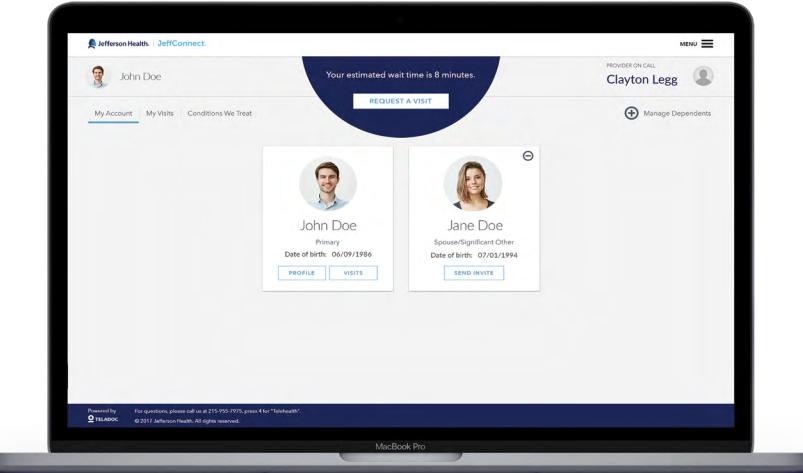
JeffConnect helps patients overcome these barriers by allowing them to meet their doctors virtually. From allergies and asthma to sprains and strains, JeffConnect makes it easy and convenient for patients to get the care they need.



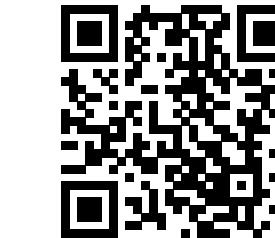
JUD E. HOLLANDER, MD

SENIOR VICE PRESIDENT OF HEALTHCARE DELIVERY INNOVATION AT JEFFERSON HEALTH

The JeffConnect Team has leveraged The DICE Group to help with evaluating and testing telehealth technology platforms. This partnership has helped keep our patients and families at the forefront of our need requirements, product development and assessment and our communication to our patients. Collaboration between these two teams has been incredibly valuable in supporting our strategic initiatives and external partnerships. 



OUR SO





WEB APPLICATION

PRODUCT OVERVIEW

The Shuttle Tracker gives patients and visitors the exact time that their shuttle will arrive and a live map to follow it around campus.



NUMBER OF VEHICLES

7 BUSES



TIME BETWEEN PICKUPS

15 MINS



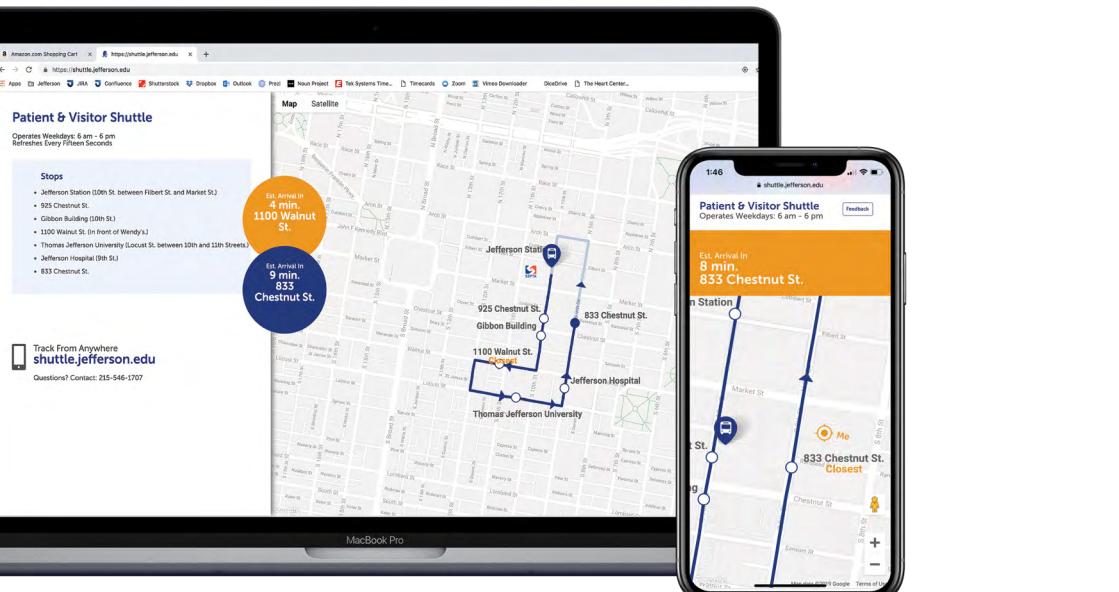
RIDERSHIP INCREASE

66.67%

▼ THE CHALLENGE

While waiting for a courtesy shuttle, patients and visitors did not know when or where it was picking them up. This frustrating experience caused many to give up and stop using the service.

Patient & Visitor Shuttle Tracker



▼ OUR SOLUTION

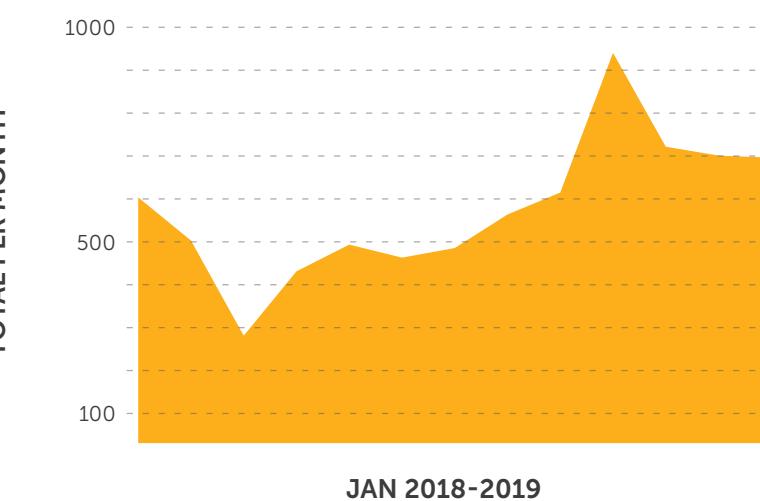
We built an intuitive location-based web app that allows patients to view the next shuttle's proximity and ETA in real time, ensuring they never miss a pickup and make it to their next stop with ease.



THE TECHNOLOGY

- Machine Learning
- Internet of Things (IoT)
- Geo-location
- GPS
- Web

PICKUPS OVER TIME



JAN 2018-2019



ACCESS

Shuttle.Jefferson.edu



CONTENT MANAGEMENT

One CMS

CREATING UNIFIED DIGITAL EXPERIENCES

PRODUCT OVERVIEW

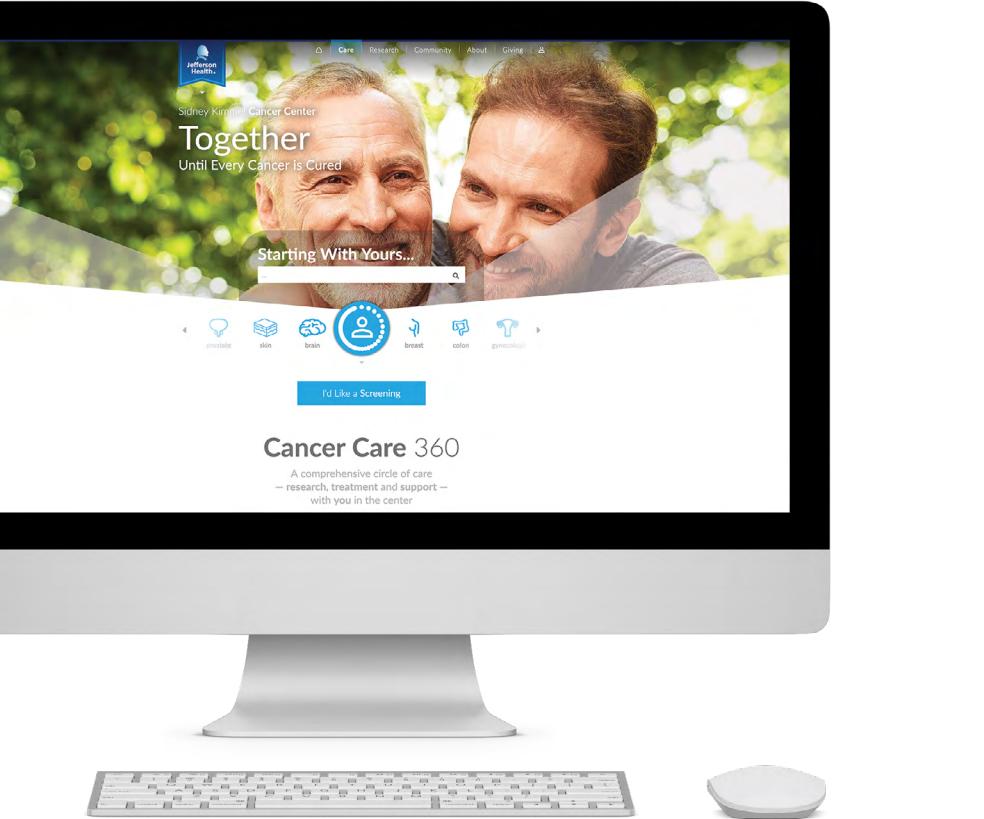
Jefferson delivers a powerful, engaging and unified web presence using the content management system (CMS), Adobe Experience Manager.

▼ THE CHALLENGE

As a growing university and health system, we needed to consolidate six separate CMSs into one unified digital experience.

▼ OUR SOLUTION

We converted all of our websites and CMSs into a single platform that provides consistent messaging and collects comprehensive audience data.



THE IMPACT OF ONE CMS



Manage digital content and assets from one intuitive platform



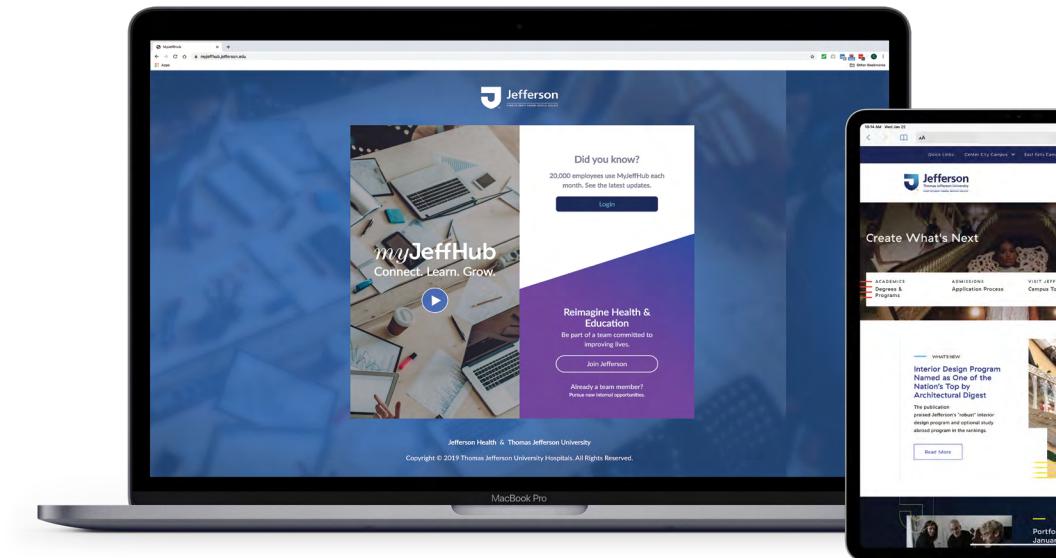
Gain a holistic view of Jefferson's web presence



Deliver content targeted to each audience



Gather audience insights and user data with enhanced analytics





WEB DESIGN

Marcus Institute

BUILDING A POWERFUL WEB PRESENCE

PRODUCT OVERVIEW

This patient-friendly website reinforces Jefferson Health's standing as the regional leader in integrative health.

▼ THE CHALLENGE

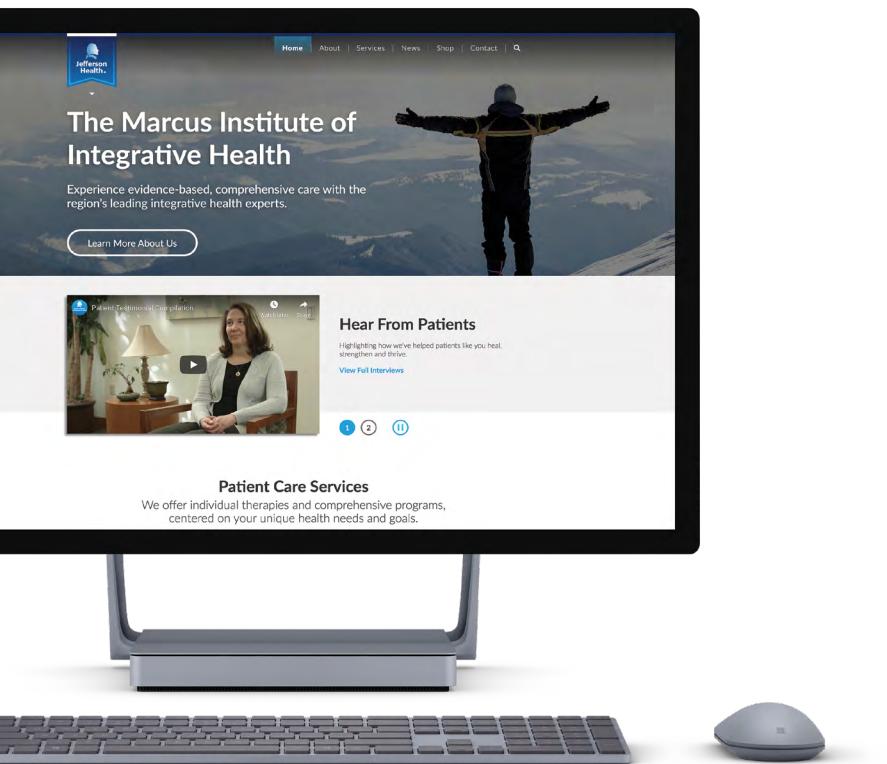
As the Marcus Institute of Integrative Health gained formal institutional status and expanded into three state-of-the-art centers, it needed a web presence that matched its rising reputation.

▼ OUR SOLUTION

DICE implemented online strategies to enhance the Marcus Institute's digital presence and reach more patients. Key additions included testimonial videos and a new eCommerce platform for nutraceutical sales.

► ACCESS

MarcusInstitute.JeffersonHealth.org



15%

INCREASE IN MONTHLY
WEB SUBMISSIONS
BETWEEN FY18 AND FY19



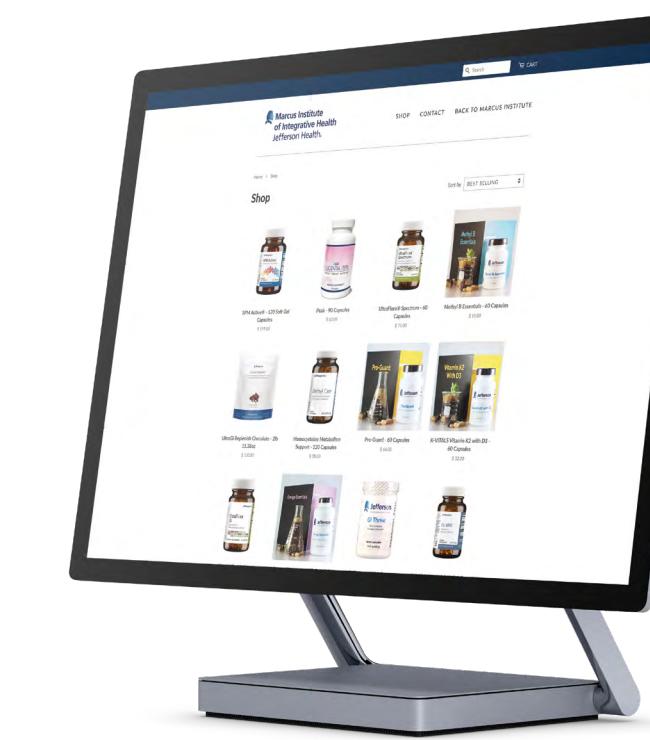
\$800K+

SUPPLEMENT SALES
VIA NEW E-COMMERCE
PLATFORM



50%

INCREASE IN SOCIAL
MEDIA OUTREACH



DANIEL A. MONTI, MD, MBA

SENIOR VICE PRESIDENT AND DIRECTOR OF THE MARCUS INSTITUTE OF INTEGRATIVE HEALTH
AT THOMAS JEFFERSON UNIVERSITY AND JEFFERSON HEALTH

“ DICE made enormous contributions to Integrated Medicine initiatives. They created a superb e-commerce platform for our retail offerings and a series of impactful patient testimonial videos for our website and internal monitors. Their creative energies and technical expertise have been invaluable to our initiatives. ”





Real-Time Clinical Dashboards

PRODUCT OVERVIEW

Real-time clinical dashboards offer insights that help Emergency Room and hospital operations teams anticipate delays, triage faster and rapidly prepare downstream services for patients, enhancing care and patient experiences.

THE CHALLENGE

Emergency Room (ER) and hospital unit flow delays can ripple through the entire care environment. If staffing can't meet demand, patients wait longer to be seen, or give up and leave. Treatment delays increase costs, decrease quality and leave patients dissatisfied, even upset. Negative opinions can translate to lower patient satisfaction scores.

OUR SOLUTION

Our customizable dashboards give staff the right information to take on high patient volume with speed and efficiency. They display hospital-wide patient flow using intuitive visual cues in real time, giving teams big picture insight at a glance.



AT-A-GLANCE MONITORING

- Boarder & bed availability
- Occupancy levels
- Patient status
- Readmission risk
- Staffing levels
- Throughput
- Test message alerts



THE IMPACT OF EFFICIENCY



74%

DROP IN LEFT-WITHOUT-BEING-SEEN RATE



24 min.

AVERAGE REDUCTION IN PATIENT WAIT TIMES



CAROL HAINES, BSN, MBA, PMP
VICE PRESIDENT OF CLINICAL TRANSFORMATION AT THOMAS JEFFERSON UNIVERSITY AND JEFFERSON HEALTH

“Displaying actionable real-time data to the entire ED team enables them to adjust quickly and provide the most timely care for improved patient experiences and outcomes.”



MOBILE APPLICATION

JeffDocs

SIMPLIFYING PROVIDER REFERRALS

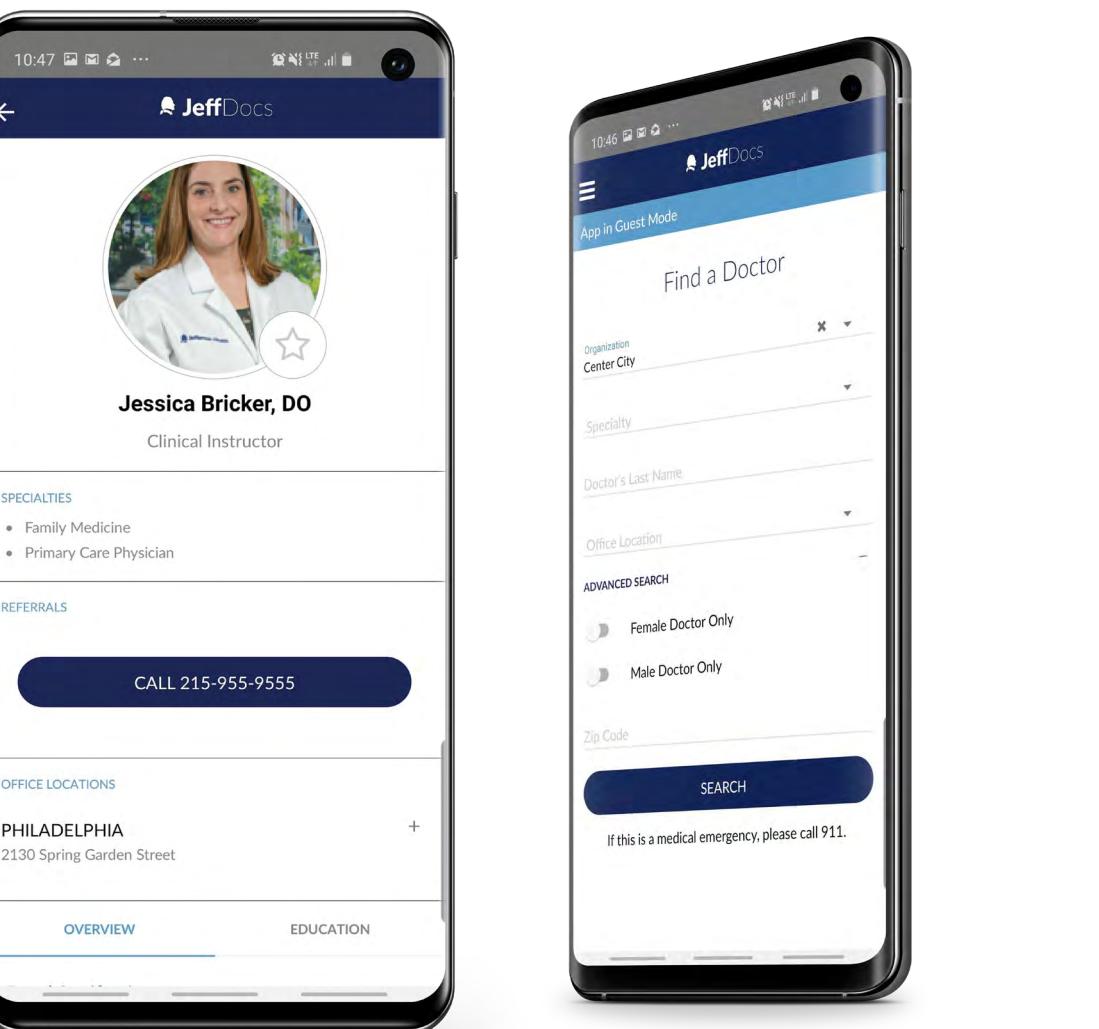
PRODUCT OVERVIEW

Jefferson Health's care network includes first-class physicians and specialists throughout Pennsylvania, New Jersey and Delaware. JeffDocs streamlines the referrals process, making it simple to find the right provider and share patient information.

 **STREAMLINE**
provider-to-provider
referrals

 **ACCESS**
contact info that's always
up to date

 **CONNECT**
Jefferson Health's
providers directly



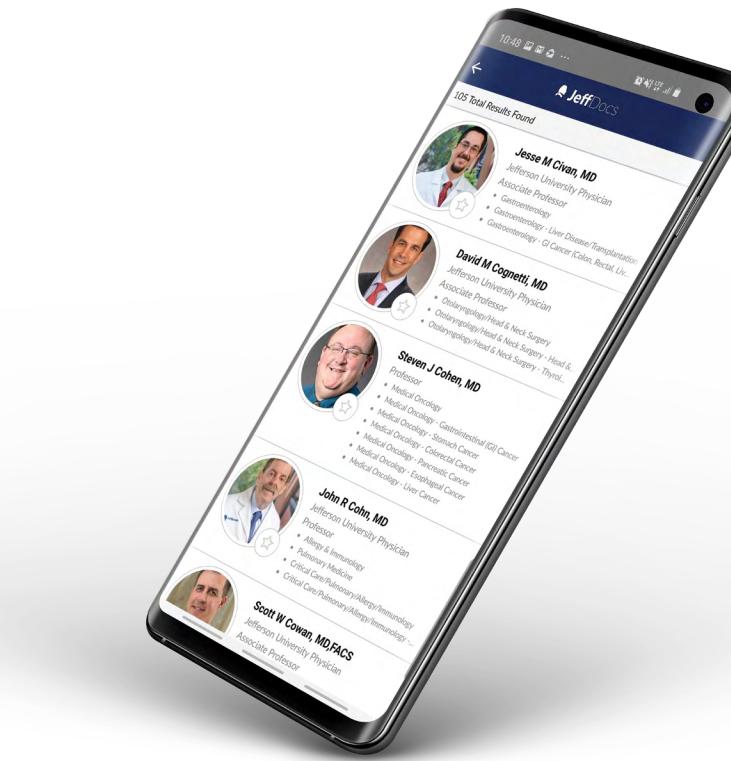
CURRENT FEATURES

 Connect safely & directly via the Doximity network for healthcare professionals

 Search providers by specialty, department, gender & location

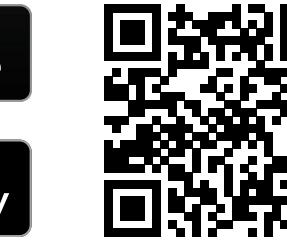
 View contact information, including all office locations

 Save your searches with the **Favorites** feature



Download on the
App Store

GET IT ON
Google Play



**STREAMLINING REFERRALS WITH
AN EASY-TO-USE MOBILE APP**



SMART DEVICE

Smart Rooms

IMPROVING PATIENT STAY VIA VOICE TECHNOLOGY

PRODUCT OVERVIEW

Our unique HIPAA-compliant voice assistant is designed specifically for patients to use during their hospital stay.

▼ THE CHALLENGE

Being in the hospital is stressful. For many patients, it's an unfamiliar setting where they have little control. Our custom-built voice assistant gives patients power over their environment to make their stay more comfortable.

▼ OUR SOLUTION

By completing an array of non-clinical tasks and improving access to information in the hospital room, our HIPAA-compliant voice assistant improves the patient experience and gives staff more time to focus on the clinical needs of the patient.



CURRENT FEATURES

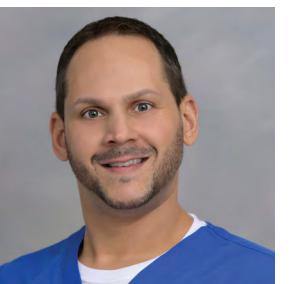
- Control TV volume, channels & power
- Get the weather forecast
- Learn about prescribed diets
- Look up hospital information & phone numbers
- Connect to & narrate EMR information
- Perform internet searches
- Solve math problems
- Record patient experience feedback



 11
LIVE ROOMS

 39
PATIENTS ENROLLED

 21
AVERAGE INTERACTIONS
PER PATIENT PER DAY



JOHN RENZI, DNP, MBA, RN
DIRECTOR OF NURSING OPERATIONS AND PATIENT CARE SERVICES AT JEFFERSON HEALTH

 The DICE Group meticulously blended their experience with technology and the experience of the nursing staff to help create Smart Rooms technology to improve the patient experience. They worked collaboratively with nursing to help understand how the technology works and took the time to train each staff member. It is evident the DICE Group wants to improve the patient experience by their collaboration with nursing. 



WEB APPLICATION

Appointment Request Form

PRODUCT OVERVIEW

Our web-based appointment request form provides a fast, easy and convenient way to schedule a visit.

▼ THE CHALLENGE

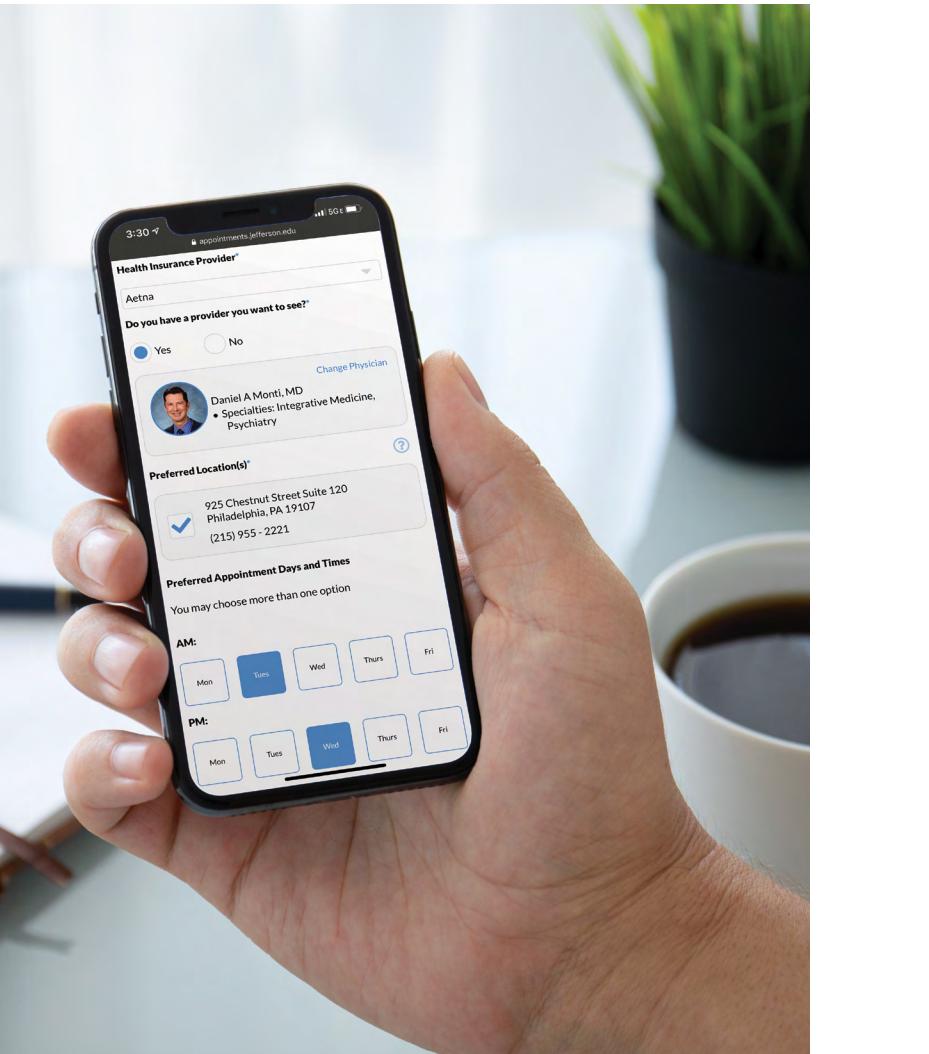
We needed to reduce the time it takes to request appointments online, increase the completion rate and streamline the fulfillment process for our staff.

▼ OUR SOLUTION

To improve user experience, we segmented our form into two versions. Patients can now choose to complete a long form or a short form with just 10 required fields. This has doubled the fill-out rate, resulting in more confirmed appointments in less time.

► ACCESS

Appointments.Jefferson.edu



REQUEST APPOINTMENTS IN < 2 MIN

- Schedule all your doctor appointments from one HIPAA-compliant portal
- Enables priority scheduling for 36,000+ Jefferson employees
- Segmented web form pre-fills location & physician data from the integrated provider directory

STATISTICS



9.7% improvement in conversions
(based on # of site visits that resulted in appointment requests)



73% increase in average # of monthly appointment requests



5,315 total appointment requests since launch



71% chatbot submissions vs. 29% form submissions (since chatbot launch on 6/27/2019 to present)



LISA GRIFFIN, MBA, CCCM

SENIOR VICE PRESIDENT OF ENTERPRISE PATIENT ACCESS OPERATIONS AT THOMAS JEFFERSON UNIVERSITY AND JEFFERSON HEALTH

“ Not only did The DICE Group develop a simplified appointment form for Jefferson Health, but they also thoughtfully considered and optimized the experience of the appointment schedulers as well. ”



WEB DESIGN

Sidney Kimmel Cancer Center

PRODUCT OVERVIEW

DICE built a website that presents the Sidney Kimmel Cancer Center (SKCC) as a best-in-class treatment center for patients diagnosed with cancer.

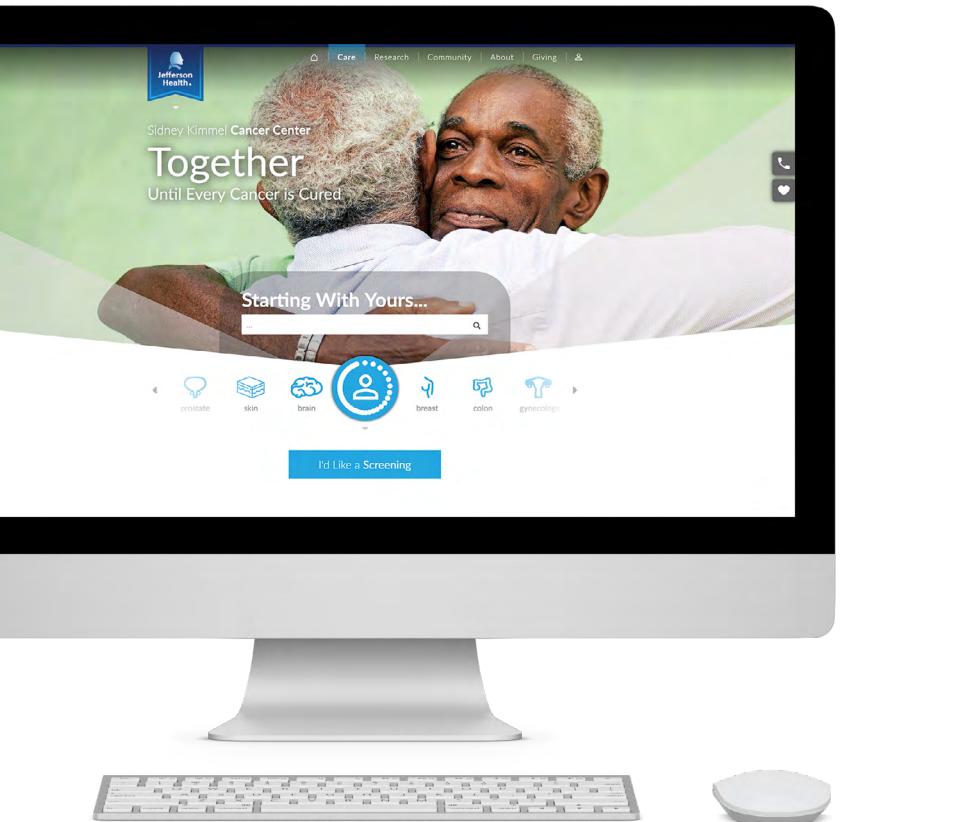
THE CHALLENGE

As a renowned National Cancer Institute (NCI)-designated cancer center and leader in clinical and academic pursuits, SKCC needed a website that genuinely and succinctly reflected its exceptional offerings for patients and researchers.

OUR SOLUTION

We reimaged SKCC's website from a user-centered and storytelling perspective to inform and inspire patients, caregivers and cancer researchers.

ACCESS
JSKCC.org



KAREN E. KNUDSEN, PHD

ENTERPRISE DIRECTOR OF THE NATIONAL CANCER INSTITUTE (NCI)-DESIGNATED SIDNEY KIMMEL CANCER CENTER (SKCC) AT JEFFERSON HEALTH

“ The major renovation that happened on our website is not just the content, but how it's presented. It's clean, it's easy to use and information is really there at your fingertips with as few clicks as possible. ”

PRE-LAUNCH VS. POST-LAUNCH

 26%
INCREASE IN WEBSITE VISITS

 495%
INCREASE IN CLICKS ON APPOINTMENT REQUEST FORM

ENHANCED WEB EXPERIENCE

- Inspirational imagery & headlines, front & center on every page
- Simplified language, written specifically for patients, families & caregivers
- Distinct navigation path built for each cancer type with relevant treatment information & FAQs
- Profiles for leadership team & researchers, highlighting their credentials & areas of focus
- DICE-customized content management system (CMS) makes it easy for SKCC staff to update the site on their own, anytime



CONTENT MANAGEMENT

PRODUCT OVERVIEW

Our secure, easy-to-use tool lets doctors update their own profiles and automatically syncs that info with integrated apps and websites.

▼ THE CHALLENGE

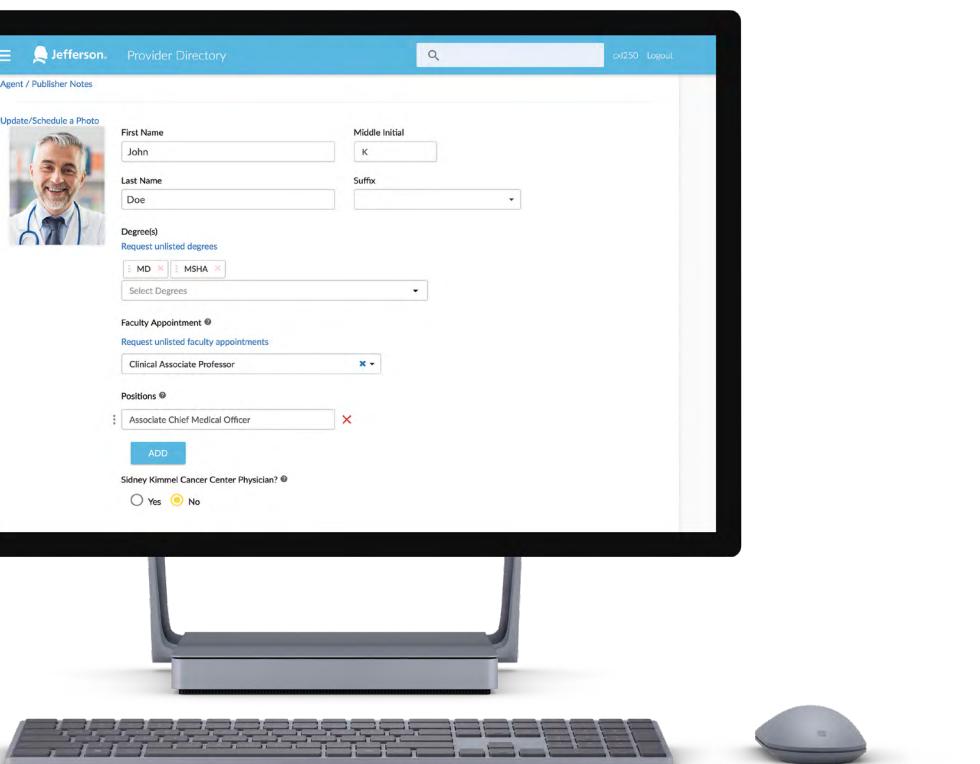
Since more and more people search for doctors online, it's essential for providers to keep their credentials and contact info current. With 4,500+ physician profiles to maintain — across multiple channels too — Jefferson Health needed to automate the updating process.

▼ OUR SOLUTION

Our Provider Directory puts doctors in control so they can update their contact info, availability, specialties and more in seconds. The associated API works as a single source of truth, simultaneously updating all integrated platforms for consistency across the board.

Provider Directory & API

ENSURING PROVIDER INFO IS ALWAYS UP TO DATE



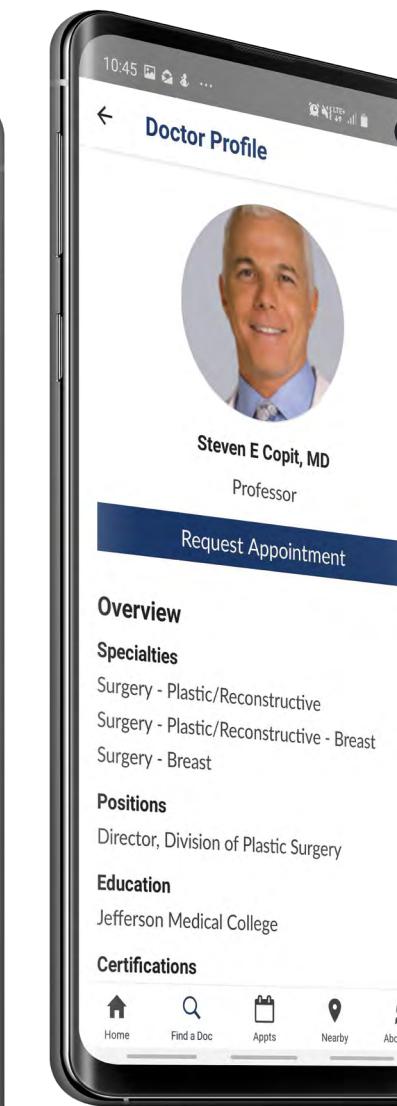
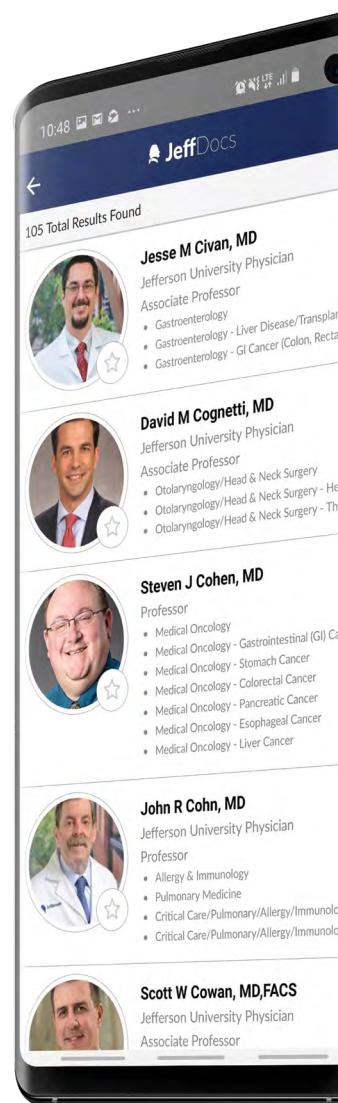
ELEGANT DESIGN FOR STRAIGHTFORWARD SELF-SERVICE



INDISPUTABLE ACCURACY ACROSS PLATFORMS



CUSTOMIZABLE EDITING
ACCESS & APPROVAL
PROCESS



INTEGRATED WEBSITES & APPS

- Jefferson Website
- Jeff Direct
- JeffDocs
- myJeffHealth



APPLICATION

JTrack

DISPLAYING STUDENT ROTATIONS IN REAL TIME

PRODUCT OVERVIEW

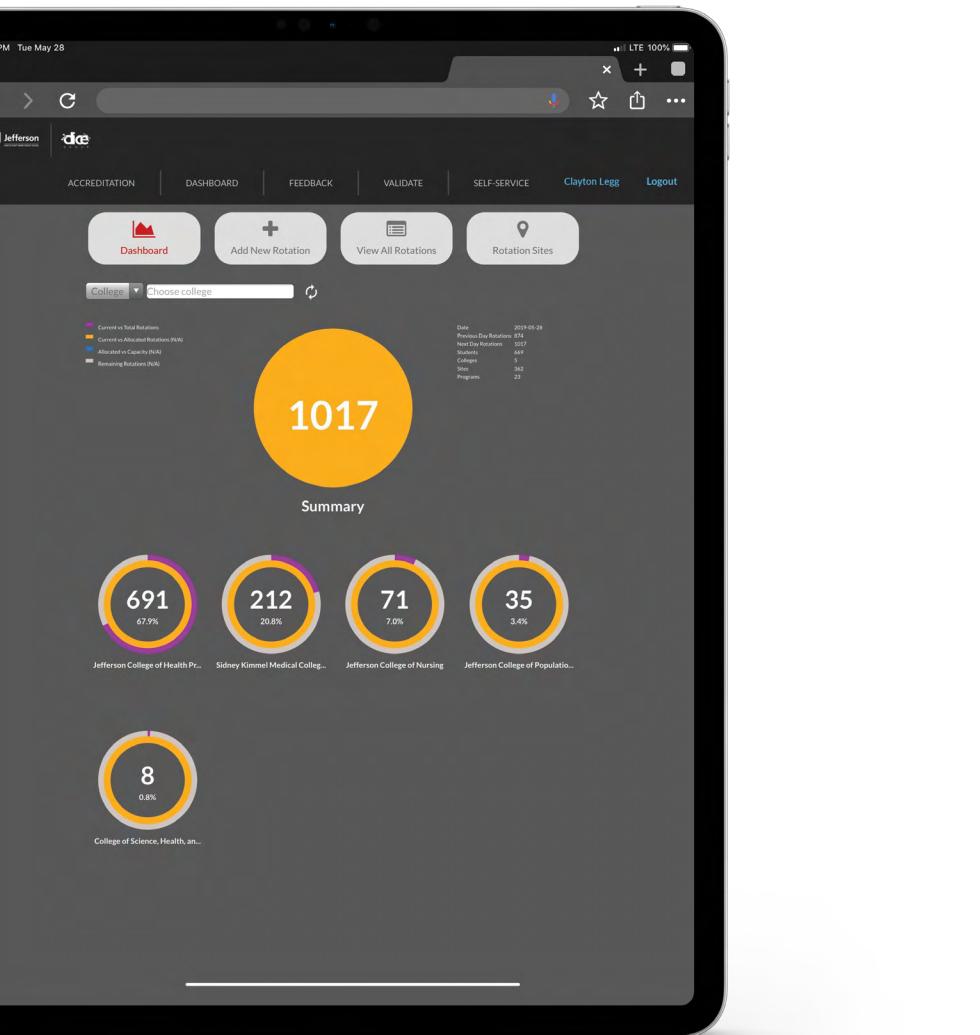
JTrack displays how and where students are distributed across thousands of clinical rotations throughout Jefferson.

THE CHALLENGE

It's important for the university to know where students in clinical rotations are and what they are doing, especially during urgent situations. But without a centralized tool to track that data, accessing rotation information becomes a challenge.

OUR SOLUTION

JTrack provides an at-a-glance overview of clinical rotation information. You can track where students are, view schedules and filter data by site or program, making it easy for Jefferson administrators to manage rotations.

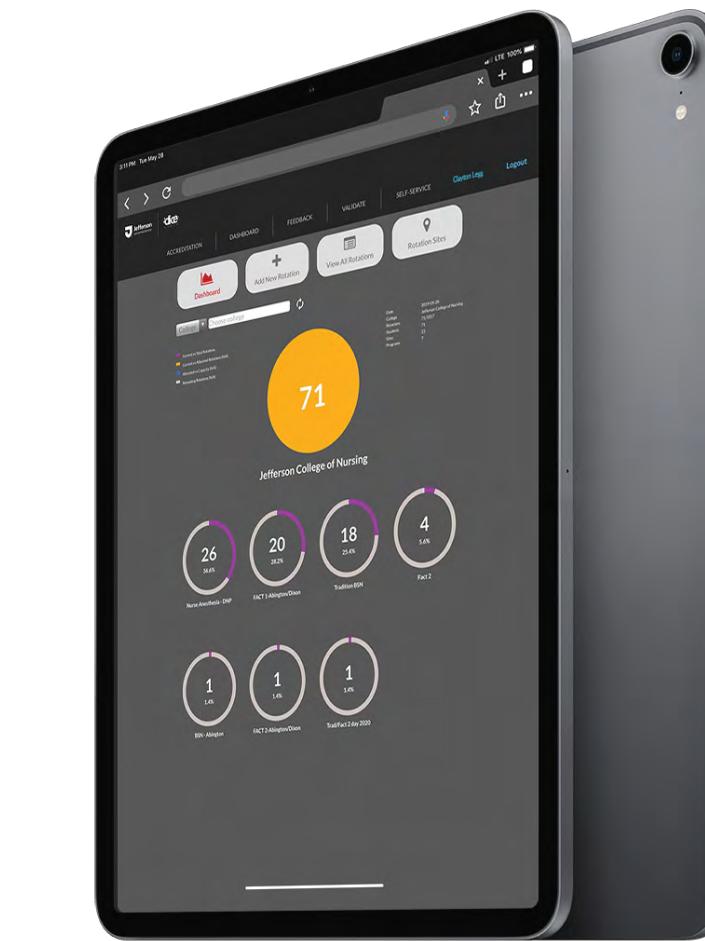


DATA-DRIVEN INSIGHTS

With JTrack, you can drill into key information for each rotation. It provides an overview of student distribution, rotation information and openings in the schedule, helping administrators identify trends and plan for future rotations.

BENEFITS

- Manage student rotations from one dashboard
- View rotation schedules & opportunities
- Gain insight into rotation distribution



2019 STATISTICS

8
COLLEGES

35
CLINICAL
PROGRAMS

8.4K
CLINICAL
ROTATIONS



APPLICATION

Alexa Skills

CREATING A FRICTIONLESS HOSPITAL EXPERIENCE

JEFFSTAT TRANSFER CENTER

JeffStat is an Amazon Alexa-powered voice assistant that initiates seamless patient transfers.

▼ THE CHALLENGE

Quick patient transfers can make the difference between life and death. A voice assistant can speed up this process by allowing staff to get transfers started hands-free.

▼ OUR SOLUTION

Our voice assistant makes it easy for staff to initiate transfers between facilities. No more waiting for callbacks or being placed on hold; just say the word and start a transfer in seconds.



JEFF REQUEST ALEXA SKILL

Jeff reQuest gives patients a convenient tool for browsing Jefferson Health's provider profiles and selecting a physician.

▼ THE CHALLENGE

Finding a doctor patients can trust and who can provide the specialized treatment they need can be overwhelming. Depending on their medical condition, some patients have to jump through multiple hoops just to schedule an appointment.

▼ OUR SOLUTION

Jeff reQuest streamlines this process by using voice search to help patients select a Jefferson physician. It can even initiate a phone call to schedule an appointment, making it easy to find the right doctor.



"ALEXA, FIND A JEFFERSON DOCTOR"



FAST & RESPONSIVE
VOICE SEARCH



FILTER RESULTS BY
SPECIALTY, LOCATION
& GENDER



INTEGRATED WITH
AMAZON ALEXA



WEB APPLICATION

JeffChampions

INCREASING DONOR REFERRALS

PRODUCT OVERVIEW

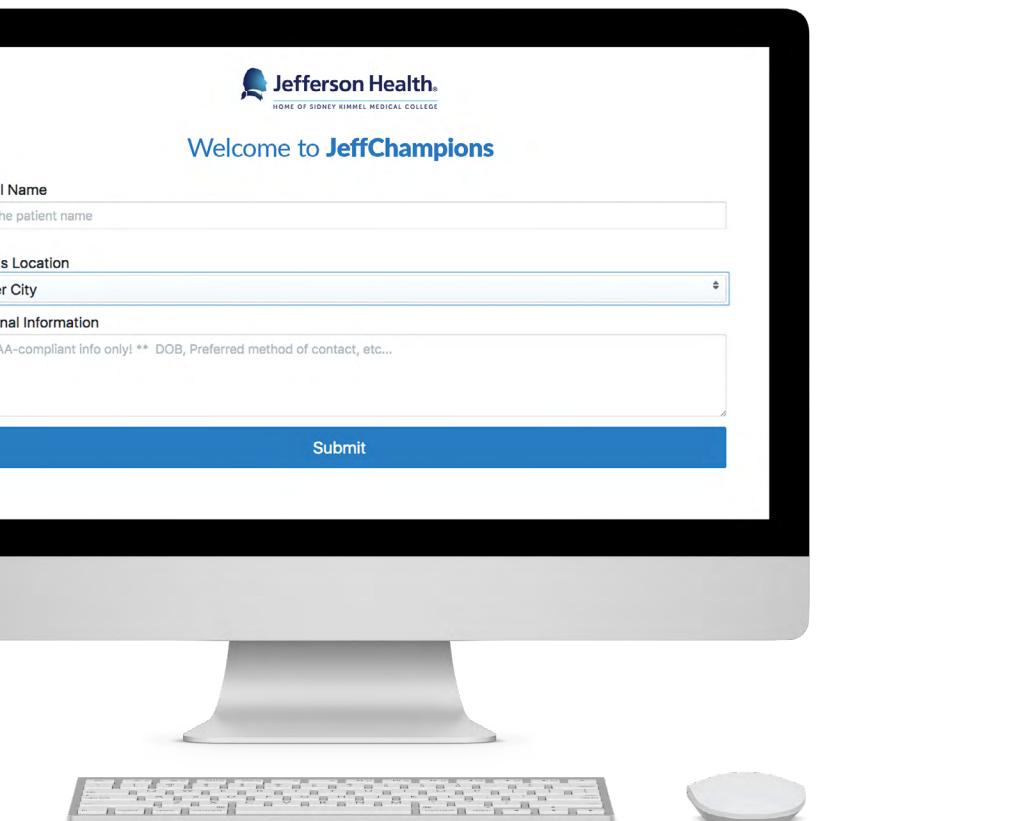
This secure web application helps Jefferson clinicians quickly refer potential donors to fundraising staff.

▼ THE CHALLENGE

Jefferson Health asks patient-facing staff to help identify potential donors. But they're busy. Firing off an email every time they meet a patient who expresses gratitude is unlikely. The enterprise needed a quick way to notify gift officers.

▼ OUR SOLUTION

JeffChampions makes it easy for staff to identify and input details about potential donors. Our philanthropy experts can then leverage that info to maximize their fundraising efforts and increase donations.



DONOR TRACKING TOOL

- Secure web app
- Intuitive interface
- Pre-populated locations
- HIPAA-compliant
- Search referrals by name, location & date

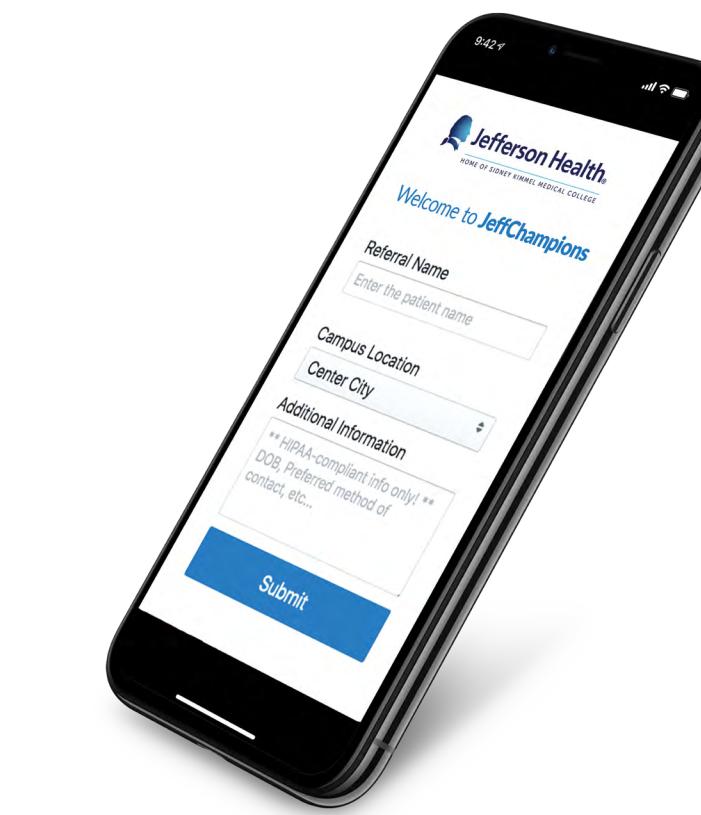
STATISTICS

 **\$1.43M**

SECURED IN ONE
RECORD MONTH

 **650+**

ENROLLED SINCE
2017 LAUNCH



WE ENGINEER SOFTWARE THAT DELIVERS RESULTS



MOBILE APPLICATION

myBaby@Jeff

TRACKING EVERY PREGNANCY MILESTONE

PRODUCT OVERVIEW

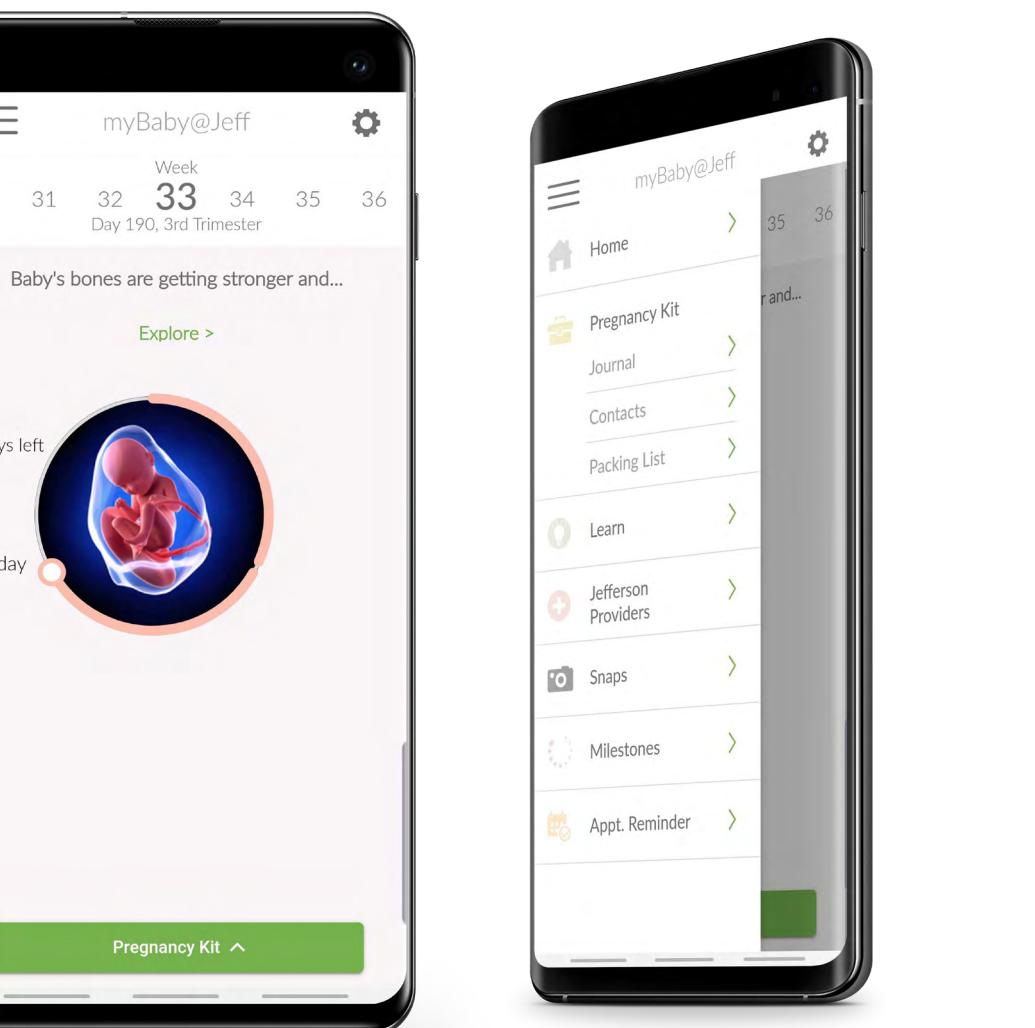
myBaby@Jeff guides expecting mothers through each stage of their pregnancy. By putting meaningful resources at their fingertips, our app helps demistify pregnancy for moms-to-be.

▼ THE CHALLENGE

For many women, pregnancy can be a whirlwind. An app that provides helpful information before, during and after can give moms-to-be peace of mind during their journey into motherhood.

▼ OUR SOLUTION

Our vision for myBaby@Jeff extends beyond nine months. After undergoing a full redesign, we see potential for it to integrate with EMRs and create a more holistic, robust app experience.



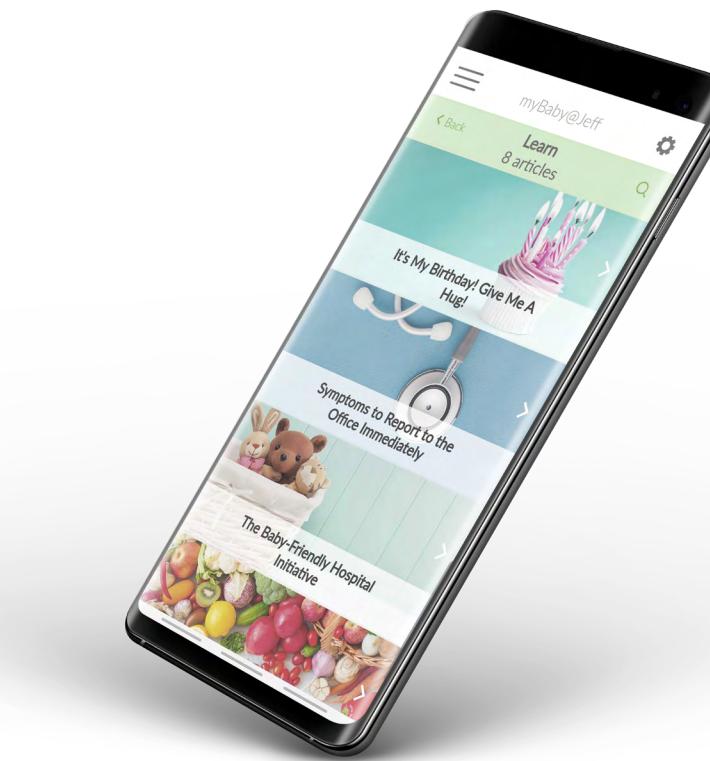
CURRENT FEATURES

- Appointment Reminders
- Milestone Tracker
- Packing List
- Photo Diary
- Pregnancy Journal
- Provider List
- Weight Tracker

IN THE WORKS

- Secure access to medical records
- Tracking & tips for trying to conceive
- Postpartum care resources for moms

CONNECTING PARENTS WITH
MEANINGFUL CONTENT



▼

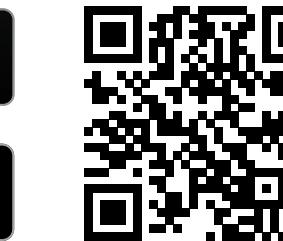
OUR SOLUTION



Download on the
App Store



GET IT ON
Google Play





MOBILE APPLICATION

At Your Service

GIVING PATIENTS A VOICE

PRODUCT OVERVIEW

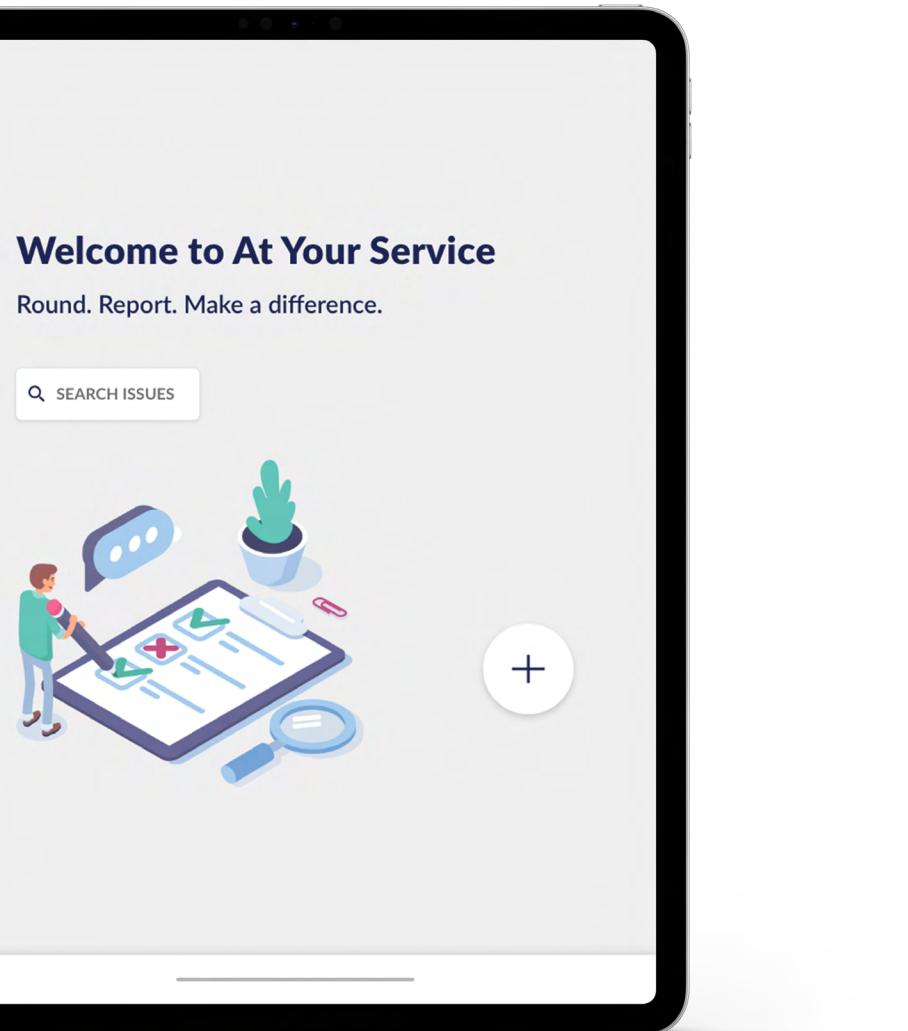
Our digital rounding tool engages patients, increases triage productivity and inspires personalized care.

▼ THE CHALLENGE

High scores on patient satisfaction surveys attract more patients and physicians, and drive up our ratings. A smarter survey tool can help staff collect patients' perspectives and act immediately to improve their stay on the spot.

▼ OUR SOLUTION

With their tablets in hand, rounding staff ask patients how they're doing and record their responses. Issues go to a portal that administrators monitor and use to direct the right resources instantly. Response times and operational efficiency improve, and patients enjoy a better hospital stay.

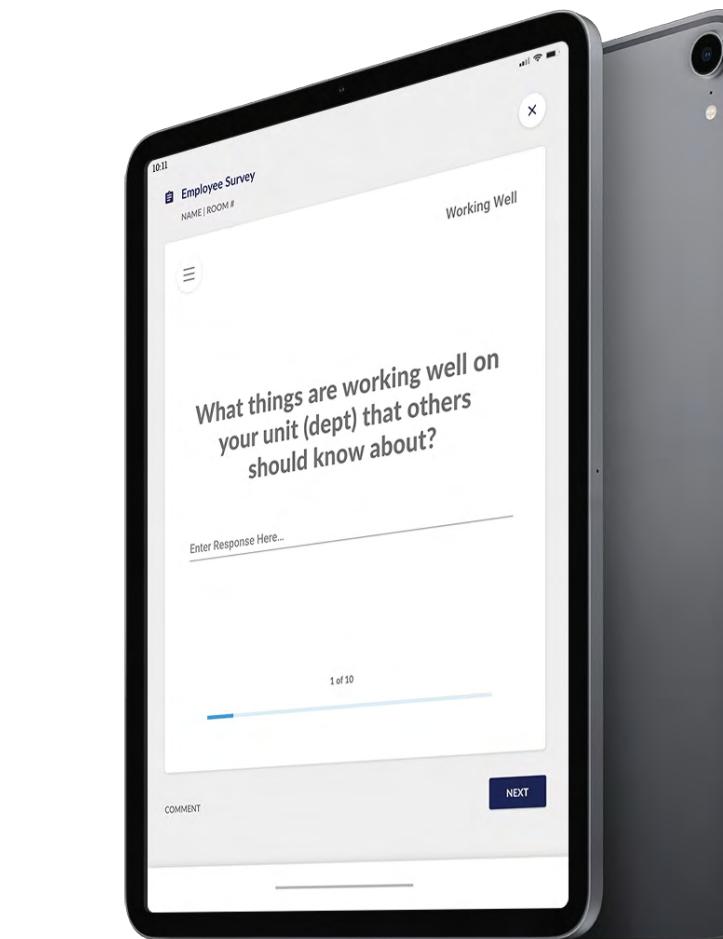


SERVICE RECOVERY

- Engage patients with conversational questions
- Triage issues in real time to the right people
- Improve communication & patient experience
- Increase the hospital's star rating from the Centers for Medicare and Medicaid Services (CMS)

MAKE AN IMPACT

- Helps identify problems before they escalate
- Holds employees accountable
- Builds trust with patients during their stay



STUDIES SHOW DIGITAL ROUNDING IS MORE CONSISTENT AND MORE EFFECTIVE THAN PEN AND PAPER



DASHBOARDS

Digital Command Center Dashboards

PRODUCT OVERVIEW

During an EHR go-live, any way to save time, cut costs and give hospital staff more support is welcome. The DICE Group took stock of the status quo and created a Digital Command Center to streamline the process.

▼ THE CHALLENGE

The workflow for resolving issues during the rollout of an electronic medical record (EMR) system was problematic. Manual data entry and multiple handoffs for one single ticket led to human error, which spiked costs and piled more stress on staff.

▼ OUR SOLUTION

Armed with iPads, our at-the-elbow support created instant tickets that displayed on real-time dashboards. We also developed custom summary reports and automated their delivery, freeing up managers to dispatch direction, not data.



RESULTS

- Top 7% in the country for Epic implementation times
- Set up Digital Command Centers for The Ottawa Hospital and Mackenzie Health
- 63% reduction in resolution time

FASTER COMMUNICATION

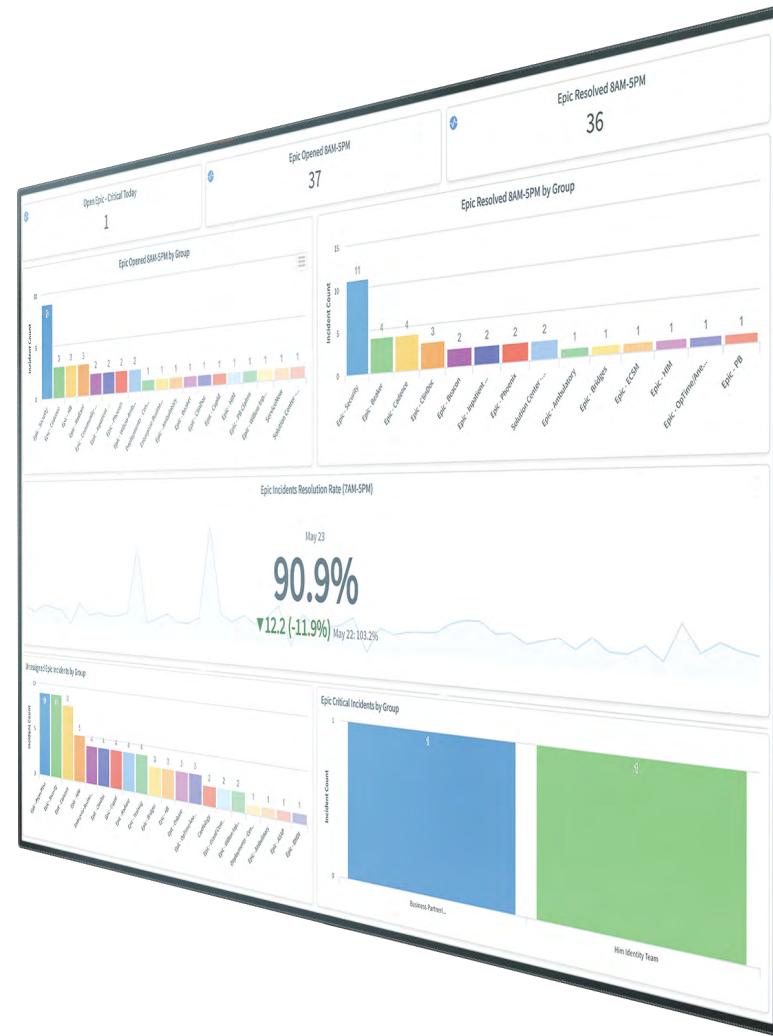
iPads, plus photos & videos, capture & share issues in seconds.

FASTER RESPONSE

Digital automation routes issues to the right team right away.

FASTER ADOPTION

We helped the hospital stabilize their EMR in three weeks, cutting the average six-week rollout time in half.





Strength Through Insight

SHEDDING LIGHT ON PATIENT PERSPECTIVES

PRODUCT OVERVIEW

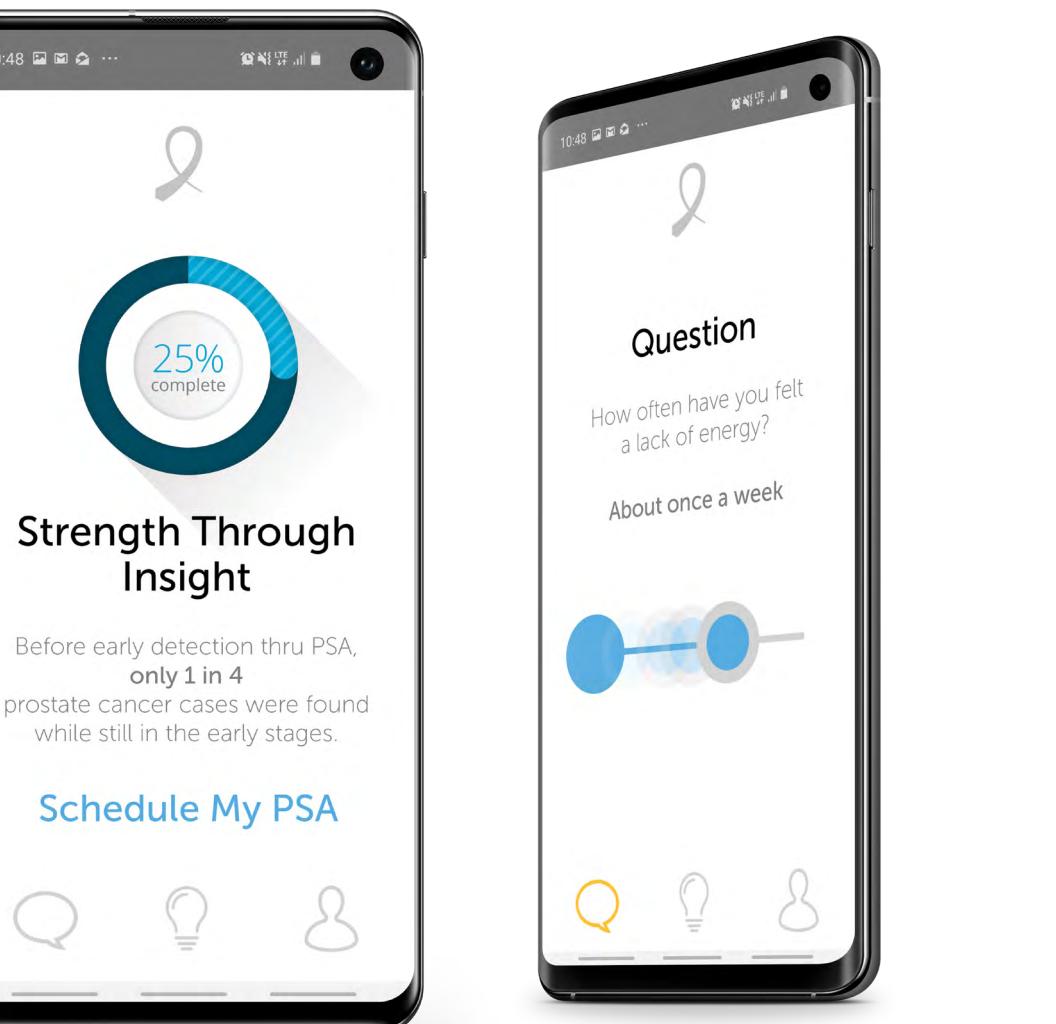
Strength Through Insight is a survey shared through a mobile app that gives prostate cancer patients a voice and helps providers optimize care.

THE CHALLENGE

Making fully informed medical decisions with your provider can be challenging when you have limited time together and don't have a way to share your quality of life between appointments.

OUR SOLUTION

Strength Through Insight gives prostate cancer patients a platform to share their perspectives and communicate outside the exam room. This helps all parties make fully informed decisions along the path to recovery.

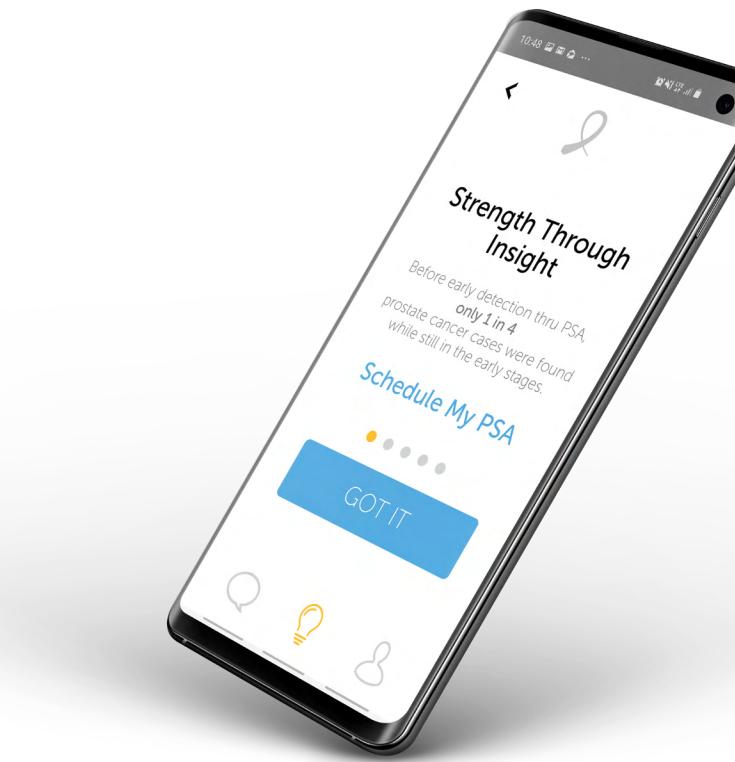


INSIGHTS THAT IMPROVE TREATMENT

The Strength Through Insight study measures prostate cancer patients' quality of life. This information can help providers optimize treatment plans, create new ones and gain a more holistic understanding of what prostate cancer patients experience.

BENEFITS

- Tracks & shares data that improves patient care
- Gives clinicians a comprehensive view of a patient's quality of life
- Enhances patient-provider communication between doctor appointments



[IMPROVING COMMUNICATIONS & MEDICAL OUTCOMES WITH A MOBILE APPLICATION]



PROCESS DEVELOPMENT

Abington L&D

IMPROVING SERVICES & ATTRACTING NEW PATIENTS

PROJECT OVERVIEW

By observing the labor and delivery floor, researchers uncovered causes for delays in care, and introduced solutions to improve communication, workflows and patient perception.

▼ THE CHALLENGE

Too many scheduled labor inductions and caesarean sections were starting late, and despite its award-winning status, the hospital had been experiencing a decline in delivery numbers for several years.

▼ OUR SOLUTION

We implemented a list of process improvements to make operations more efficient for less money. Because these changes enhance the patient experience, they should help attract new patients and increase deliveries.



GERARD M. CLEARY, DO

CHIEF OF STAFF, CHIEF MEDICAL OFFICER, AND SENIOR VICE PRESIDENT AT ABINGTON - JEFFERSON HEALTH

“ DICE has worked collaboratively with the Enterprise Medical Advisory Council to identify a variety of projects at each division. Projects vary from improving flow to model redesign for efficiency and patient experience. DICE is a valuable partner in “improving lives” at Jefferson. ”

IMPLEMENTATION

- Color-coded STAT Lab paper helps staff identify urgent cases at a glance, improving speed of care
- Patients surveyed via iPad about their Triage experiences to help reveal & remove pain points
- Midwife hired to meet growing consumer demand from low-risk patient population
- Anesthesiology joined morning huddles to enhance communication between teams & flag potentially high-need patients
- Dedicated Nurse Anesthetist added to OB Anesthesiology Team to reduce patient wait times for pain management

SOLUTIONS IN THE WORKS



WEBSITE ENHANCEMENTS

Redesigning to be more user-friendly & to include a visual tour



BIRTHING SUITES

Renovating two labor rooms to feature modern birthing center amenities



KIOSKS & ZOOM ROOMS

Jefferson Kiosks

ENGAGING USERS ON SITE

PRODUCT OVERVIEW

By embracing touchscreen technology, our kiosks welcome students and patients to interact with Jefferson's content and community.

UNIVERSITY SEMINAR SIGN-UPS

Interactive displays around campus invite students to view upcoming seminars and register for them with a simple swipe of their Jefferson ID card.

CANCER CENTER EVENT REGISTRATIONS

This kiosk helps patients and caregivers discover upcoming events, join support groups and subscribe to newsletters to stay connected.



ZOOM ROOMS

CONFERENCE SOLUTIONS

Zoom's video conferencing software is coming to each meeting room across the enterprise for streamlined collaboration between teams and Jefferson's departments.

▼ THE CHALLENGE

Previously, departments across the enterprise were using different solutions for their conferencing needs. This led to disparate hardware systems, employee frustration and maintenance nightmares.

▼ OUR SOLUTION

Zoom Rooms are work spaces that streamline the process of scheduling, hosting and participating in meetings. Features like one-touch start, wireless sharing and audio and HD video ensure a robust conferencing experience, making it easy to host meetings anywhere.



158

TOTAL ZOOM ROOMS

\$2.5M

INFRASTRUCTURE SAVINGS

960K+

MEETING MINUTES PER MONTH

05

XR Lab

EXTENDING REALITY

WHAT DOES THIS ALL MEAN?



REALITY

our unchanged environment



AUGMENTED

overlaying digital content with reality



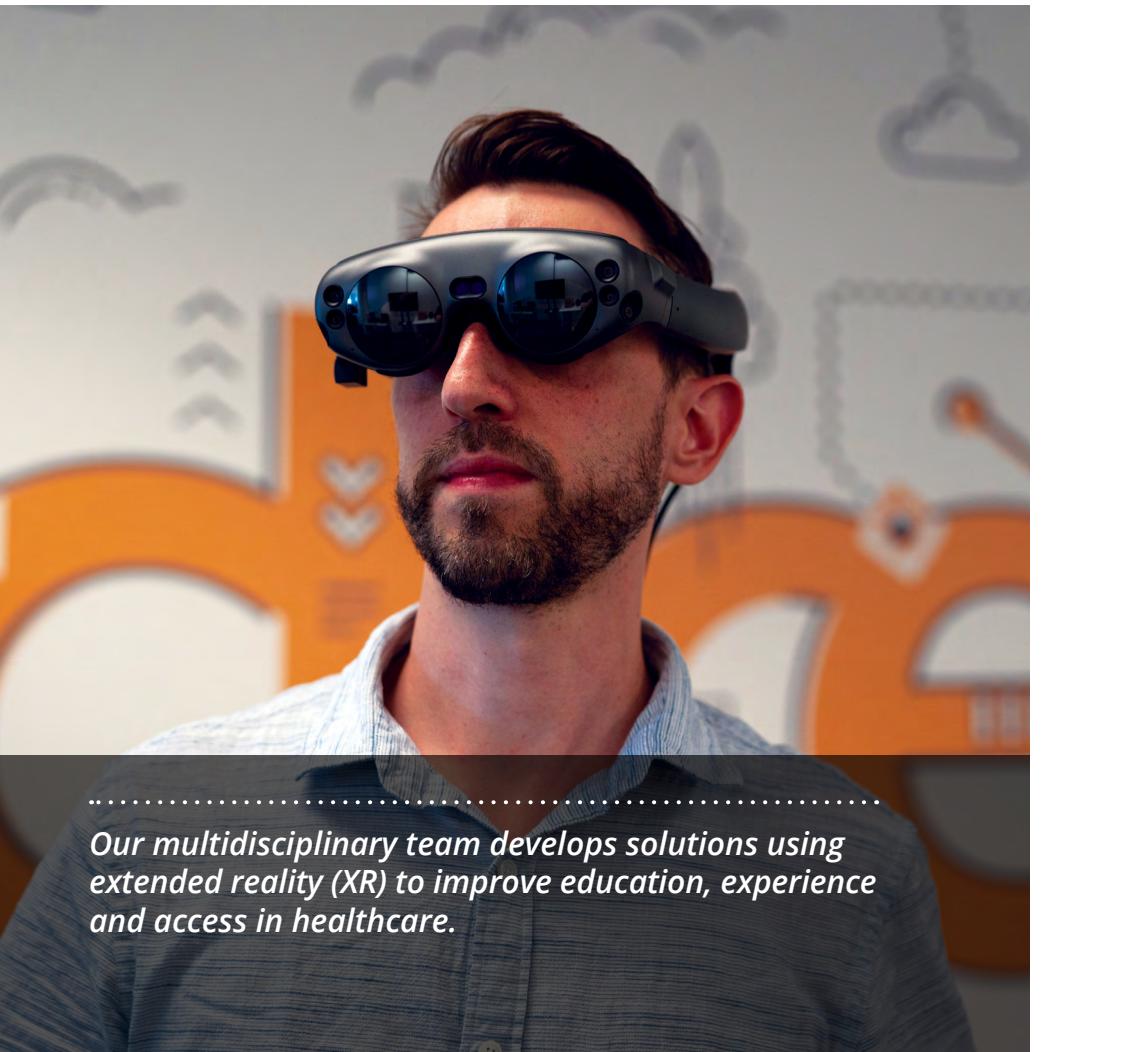
MIXED

the digital and physical worlds interacting



VIRTUAL

creating an immersive simulated environment



EXPLORE

We gather information to conduct studies directly related to XR.



DESIGN / BUILD

We advise, design products and manage workflows.



EDUCATE

We share our knowledge through conferences and our Mobile Lab.

OUR SERVICES

01

MEDICAL STUDIES

We work with you to design a lean, comprehensive study and implement it.

03

XR CONSULTING

Our experts will help you navigate the many elements of augmented and virtual reality in healthcare.

02

CREATIVE DIRECTION

Our team can help develop a strategy for designing and marketing your product.

04

HANDS-ON XR EDUCATION

With our Mobile Lab, we bring our gear, equipment and experts to events so you can learn about new technology.

AI Lab

BRINGING AI TO JEFFERSON

WHAT'S OUR PROCESS?

RESEARCH & DEVELOPMENT

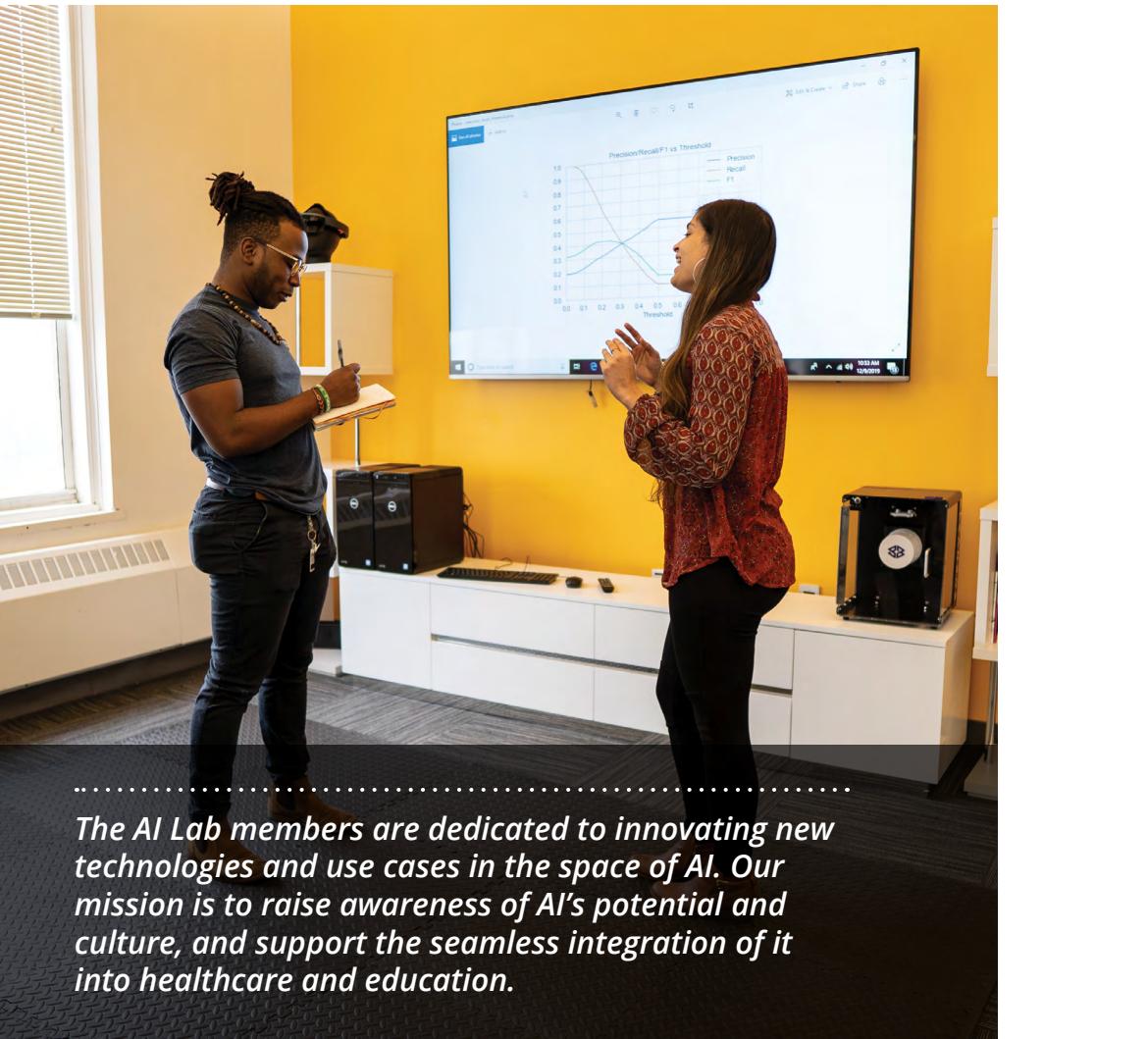
Every feature behind our solutions is based in quantitative and qualitative research.

EDUCATION

Our health advisory board helps bridge the knowledge gap between engineers and clinicians.

COLLABORATION

We partner closely with stakeholders to pinpoint their needs and deliver the best solution.



FOCUSED ON THE FUTURE



ARTIFICIAL INTELLIGENCE (AI)

Branch of computer science involved with the simulation of intelligent behavior in computers



NEURAL NETWORKS

Computing systems deeply inspired by the biological neural networks found in animals' brains



MACHINE LEARNING (ML)

Application of AI that gives a system the ability to improve without being explicitly programmed



DEEP LEARNING

Subset of ML that allows networks to learn from massive sets of unstructured and unlabeled data

OUR SERVICES

01 CONSULTING

We determine if AI is appropriate for our partners, advise on how to aggregate and shape the data in question, and offer ethical guidance in order to avoid bias in AI.

02 TRAINING

We teach stakeholders how to collect solid data for predictive analysis. Via our health advisory board, social media and special events, we share our AI knowledge.

03 DEVELOPING

We share research for model development and use a design approach when implementing evidence-backed AI solutions.

Learning Lab

REDEFINING THE LEARNING EXPERIENCE

OUR STEP-BY-STEP PROCESS



SEEK

Ideas from industry journals, workshops and conferences



EXPERIMENT

With emerging technology and innovative methodologies



EVALUATE

Existing models, best practices and team's collective knowledge



DESIGN

Engaging, interactive, student-centered learning experiences



We live what we promote: a culture of learning. Continually building our skills and knowledge base allows us to discover and support innovative approaches to teaching and learning.



PILOT AND LAUNCH

With stakeholders, then a broader audience



GATHER

Analytics and feedback from focus groups



REFRESH

Courses and content, guided by new insights



OUR PROJECTS

- Caring for Trafficked Persons: Guidance for Healthcare Providers
- Trauma-Sensitive Approach to Caring for Patients with Opioid Use Disorder in the Emergency Department
- 15 Minutes Can Save Your Life: A Patient-facing Module to Demystify the Colonoscopy Process
- Nurse Training VR Simulator for Falls Prevention

HumanX Lab

REDRAWING THE LIMITS

SHAPING THE FUTURE



EXPLORE

We dive into areas where we see potential for innovation to impact human health.



LEARN & ENGAGE

We attend conferences and workshops, and contribute to digital publications to gather and share insights.



CONNECT

We foster the intersection of creativity, research and clinical expertise, working together to build the future of healthcare.



DISCOVER

We're always on the lookout for areas where we can solve complex problems using our design-thinking approach.



EXPERIMENT

Thinking outside the box is just fine, but we'd rather blow it up.



CREATE

We embrace creativity and innovation to enhance what exists and invent what's next.



ITERATE

We follow an agile philosophy, seeking ways to disrupt our industry — and never stop.



IoT Lab

BUILDING CONNECTED HEALTHCARE & EDUCATION

FOR JEFFERSON & BEYOND



REMOVING FRICTION

Devices like smart watches and implanted monitors collect and share patient data remotely, around the clock and in real time.



ENHANCING CARE

This empowers patients to self-monitor their health and gives providers a fuller view, which can improve diagnosis accuracy and speed to treatment.



SOARING POTENTIAL

Use cases are proving to be less expensive, less intrusive and more patient-centered than traditional care methods.



OUR SOLUTIONS



JIOT

Jefferson's HIPAA-compliant IoT system is the first of its kind in the country.



SMART ROOMS

This HIPAA-compliant voice assistant for patients instantly provides information and answers, and gives them hands-free television controls.



HEALTHY HANDS

To improve clinical staff's handwashing habits, we placed a screen at a sink and played a video with fun facts that kept them engaged for a full 20 seconds.



ECODICE CHECKOUT

This application connects devices around the DICE office, automates inventory control, and even tells us when it's time to water the plants.





BRINGING DIGITAL TO LIFE



Neil Gomes CHIEF DIGITAL OFFICER

Executive Vice President for
Technology Innovation & Consumer Experience

Founder of The DICE Group

neil.gomes@jefferson.edu

[@neilgomes](https://twitter.com/neilgomes)

ABOUT

Neil Gomes is Jefferson's Enterprise Chief Digital Officer, Executive Vice President for Technology Innovation and Consumer Experience and founder of The DICE Group. A proven leader in consumer-focused technology innovation and digital transformation, Neil and his team help define Jefferson's innovation strategy and serve as catalysts for digital transformation and consumer experience within the hospital and university system and with partner organizations.

At Jefferson, Neil has secured grants, generated new revenue via innovative digital solutions, developed new and future-ready business models for growth. He also architected synergistic partnerships with startups and large organizations, like Google, Adobe, Apple, Microsoft, Domo, AT&T and SAP to service Jefferson's patients, students, staff and partners.

Previously, Neil helped build the world's largest developer of custom e-learning applications at the Fortune 500, \$108 billion, Tata Group of Companies in just two years. He also led a team at the University of South Florida (USF) that built a portfolio of online learning courses, earning the institution over \$3.6 million in annual revenue and helped to achieve a philanthropic goal of \$1 billion in three years.

A lifelong learner, Neil has earned an MBA from Goa University in India and an MEd in Instructional Technology and Design from USF where he is currently finishing his PhD, while simultaneously pursuing an EMBA from Brown University and IE Business School. In addition, Neil has earned certificates from Jefferson, Wharton, Harvard Business School Online, MIT and DGOU.



LEADERSHIP

IMPROVING EXPERIENCE BY DESIGN



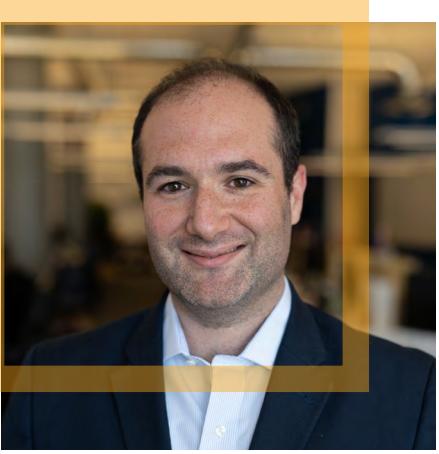
Viraj Patwardhan

CONSUMER EXPERIENCE

Vice President of
Digital Design & Consumer Experience

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🐦 @viraj_says



Robert Neff

TECHNOLOGY SOLUTIONS

Vice President of
Digital Solution Development

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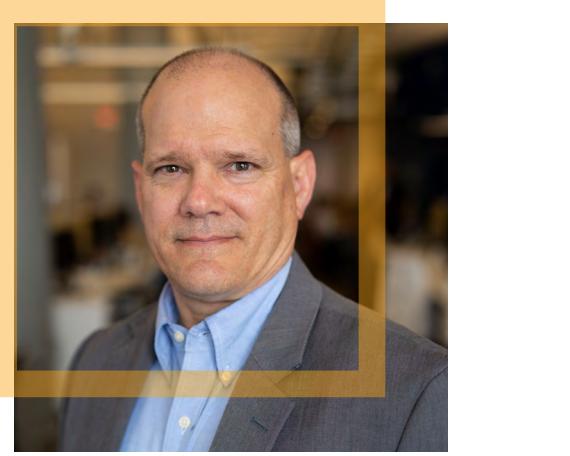
🐦 @rneff50

DEVELOPING TECHNOLOGY AND REENGINEERING CARE



LEADERSHIP

CLOSING THE LOOP ON SOLUTIONS THAT MATTER



Matthew Ernst
DIGITAL SERVICES

Vice President of
Digital Services, Business Development, & Learning

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Kristan Davis
DIGITAL LEARNING

Director of
Digital Learning & Education Technology

✉ kristan.davis@jefferson.edu

🐦 @kristanjdavis

DRIVING EXCELLENCE THROUGH CONTINUOUS LEARNING

