

HIMSS[®]19

CHAMPIONS OF HEALTH UNITE

Global Conference & Exhibition
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Bringing Digital to Life

Session 28, February 12, 2019

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Maia Ottenstein Digital Experience Design Lead for UX Research

The DICE Group at Thomas Jefferson University and Jefferson Health

CONFLICT OF INTEREST

Neil Gomes, MBA, M.Ed., CSM, CSPO

Executive Vice President and Chief Digital Officer

Has no real or apparent conflicts of interest to report.

Maia Ottenstein

Digital Experience Design Lead for UX Research

Has no real or apparent conflicts of interest to report.



AGENDA

- Understanding the patient journey
- How to identify pain points
- Identifying and addressing opportunities for innovation
- How Jefferson Health addresses problems in healthcare through The DICE Group
- Three examples of how we are transforming the patient journey
- The impact of design solutions on the overall healthcare journey



LEARNING OBJECTIVES

- Identify the current state of a healthcare consumer journey and how digital platforms and solutions can enhance these journeys and make them more meaningful.
- Illustrate opportunities for innovative change within which health systems can provide better care.
- Share how innovative solutions have transformed our consumer journey.
- Demonstrate the advantages of gaining consumer trust and support from a business perspective.



EXISTING APPROACHES TO IMPACTING THE PATIENT JOURNEY



WHAT MOST PEOPLE THINK OF WHEN THEY HEAR “PATIENT JOURNEY”



ACTION

EXPERIENCE SYMPTOMS

MAKE APPOINTMENT

MEET WITH DOCTOR

GO HOME

EXPECTATIONS

Recognize something is wrong.

Decide the symptoms are worthy of a doctor’s visit, call a primary care provider’s office.

Meet with the doctor. Review symptoms, feedback, and recommendations with doctor.

Go home, follow doctor’s recommendations, and feel better.

EXISTING SOLUTIONS

(AND WHY THEY AREN'T ENOUGH)



EXPERIENCE SYMPTOMS

Recognize something is wrong.



MAKE APPOINTMENT

Decide the symptoms are worthy of a doctor's visit, call a primary care provider's office.



MEET WITH DOCTOR

Meet with the doctor. Review symptoms, feedback, and recommendations with doctor.



GO HOME

Go home, follow doctor's recommendations, and feel better.



OUR APPROACH TO IMPROVING THE PATIENT JOURNEY





**Healthcare &
Education**

?
+



Design

?
+



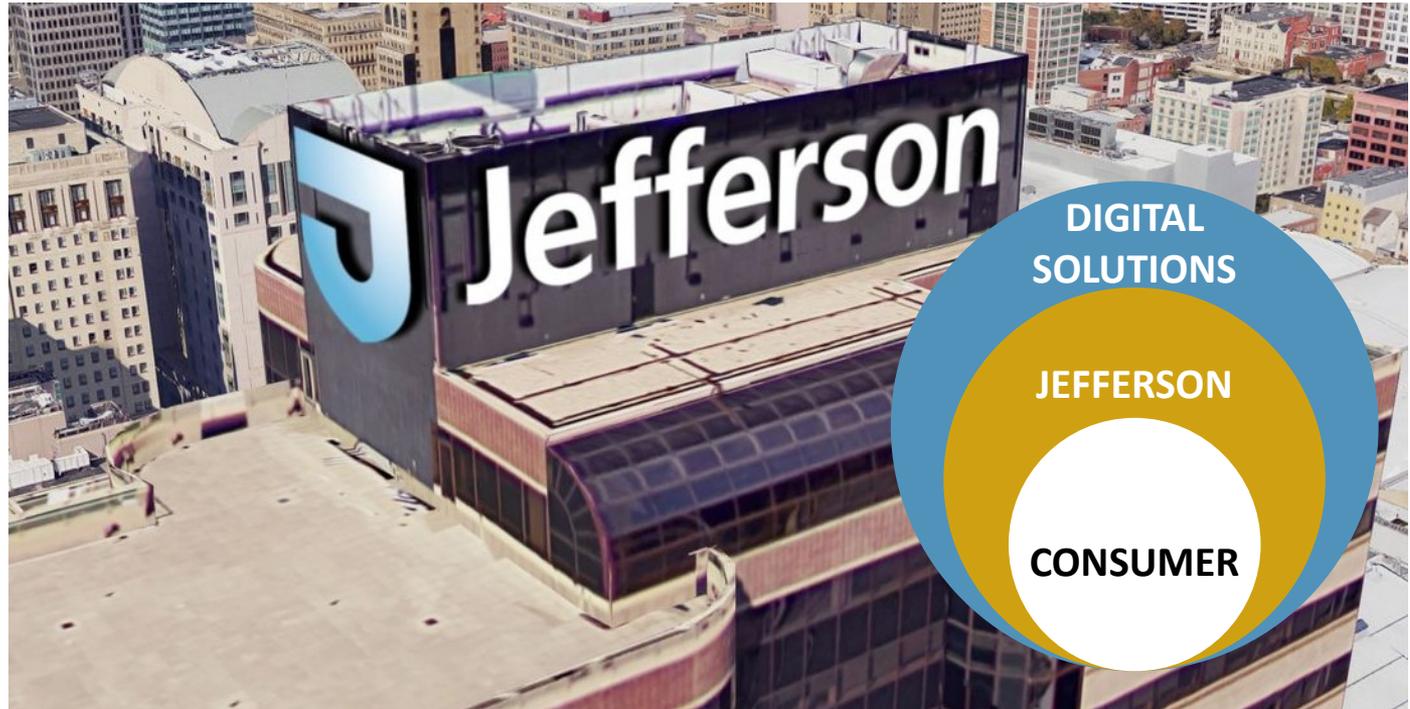
Tech

An Identity Crisis?

...Not Really...

More of an Existential Crisis

IDENTIFY NEEDS & OPPORTUNITIES





18

HOSPITALS

6.1B+

REVENUE

34+

OUTPATIENT &
URGENT CARES

5K+

PHYSICIANS

100K

ADMISSIONS

3600+

FACULTY

\$218M

IN CHARITABLE
CARE

15

COLLEGES

6000+

NURSES

CONSUMER = PATIENTS, STUDENTS, STAFF, DONORS... HUMANS

CARE, LEARNING, WORK, RESEARCH, GIVING... ...LIKE EVERYTHING ELSE DIGITAL



ACCESS

Ease of Access to
Jefferson Services



EXPERIENCE

Closed-loop Digital
Experiences



CONVENIENCE

Services via Web, Mobile,
Wearables, IoT, etc.



FUNDAMENTAL & AUTHENTIC TRUTHS

PRINCIPLES

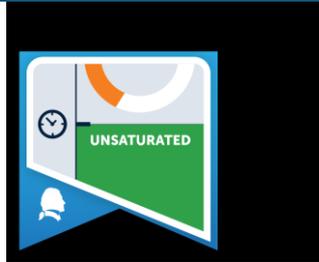


THE DICE GROUP AT JEFFERSON

150 +
TEAM

130 +
PROJECTS

10 X
RETURNS



Dashboards



JeffBNB



JeffDocs



JTOG



myBaby
@Jeff



myJeffHealth



Strength
Thought Insight



Leadership
Rounding

THE NEED FOR THOUGHTFUL AND THOROUGH SERVICE DESIGN



UPGRADE YOUR PATIENTS' EXPERIENCE

Caring about your patients makes the difference between their potential anguish and their potential delight.



GROWING DEMAND FOR SERVICE DESIGN IN HEALTHCARE

32.51%

Consumers said in 2016 that patient ratings are the most important information when choosing a hospital.¹

80%

Of patients reported they would switch providers for convenience factors alone.²

“While patients praise their doctors and nurses, they’re far less likely to rave about their broader service experiences.²”

“Organizations need to adjust away from an episodic model, and toward continuous relationship cultivation.²”

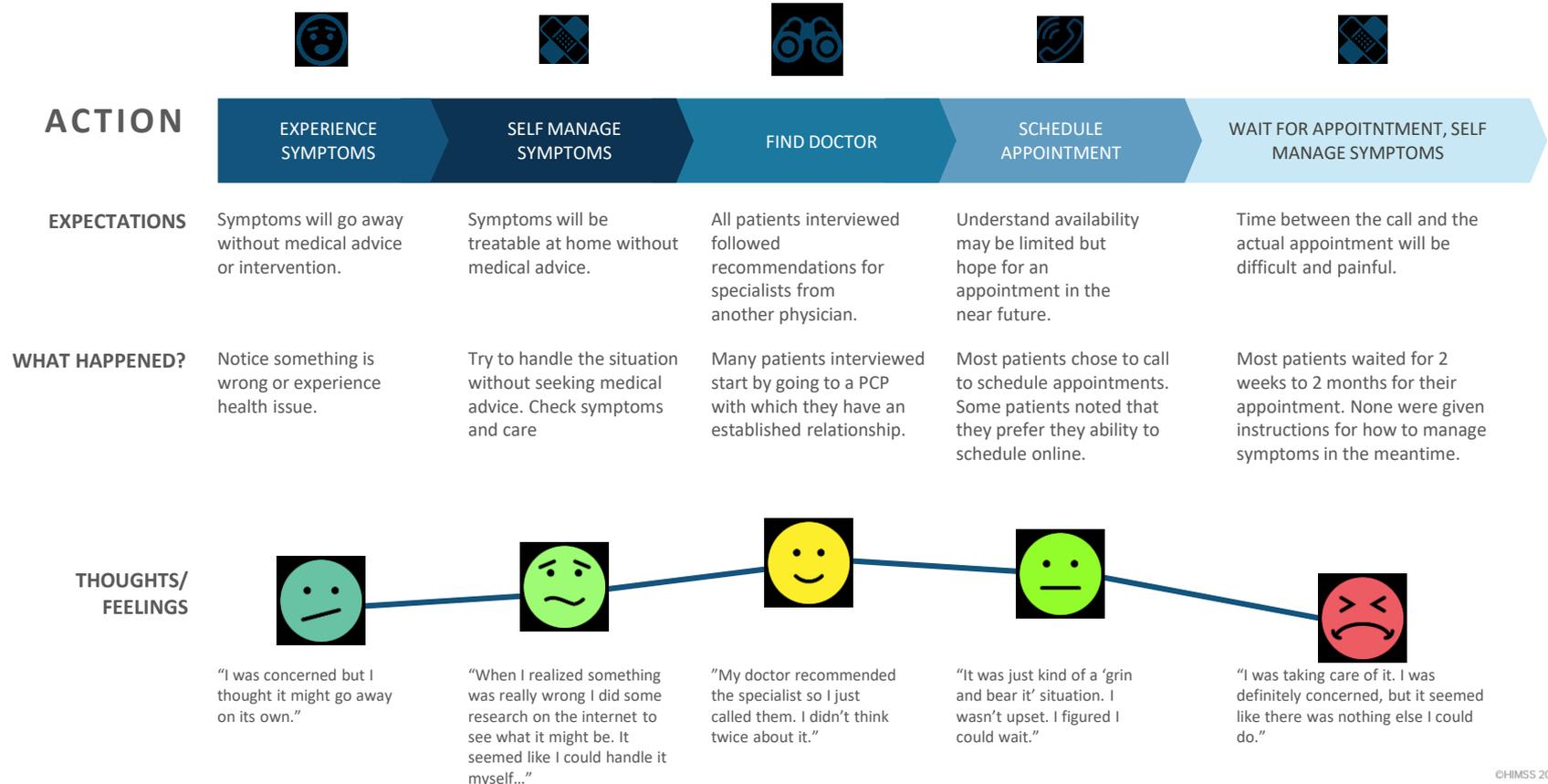
- *NRC 2019 Healthcare Consumer Trends Report*



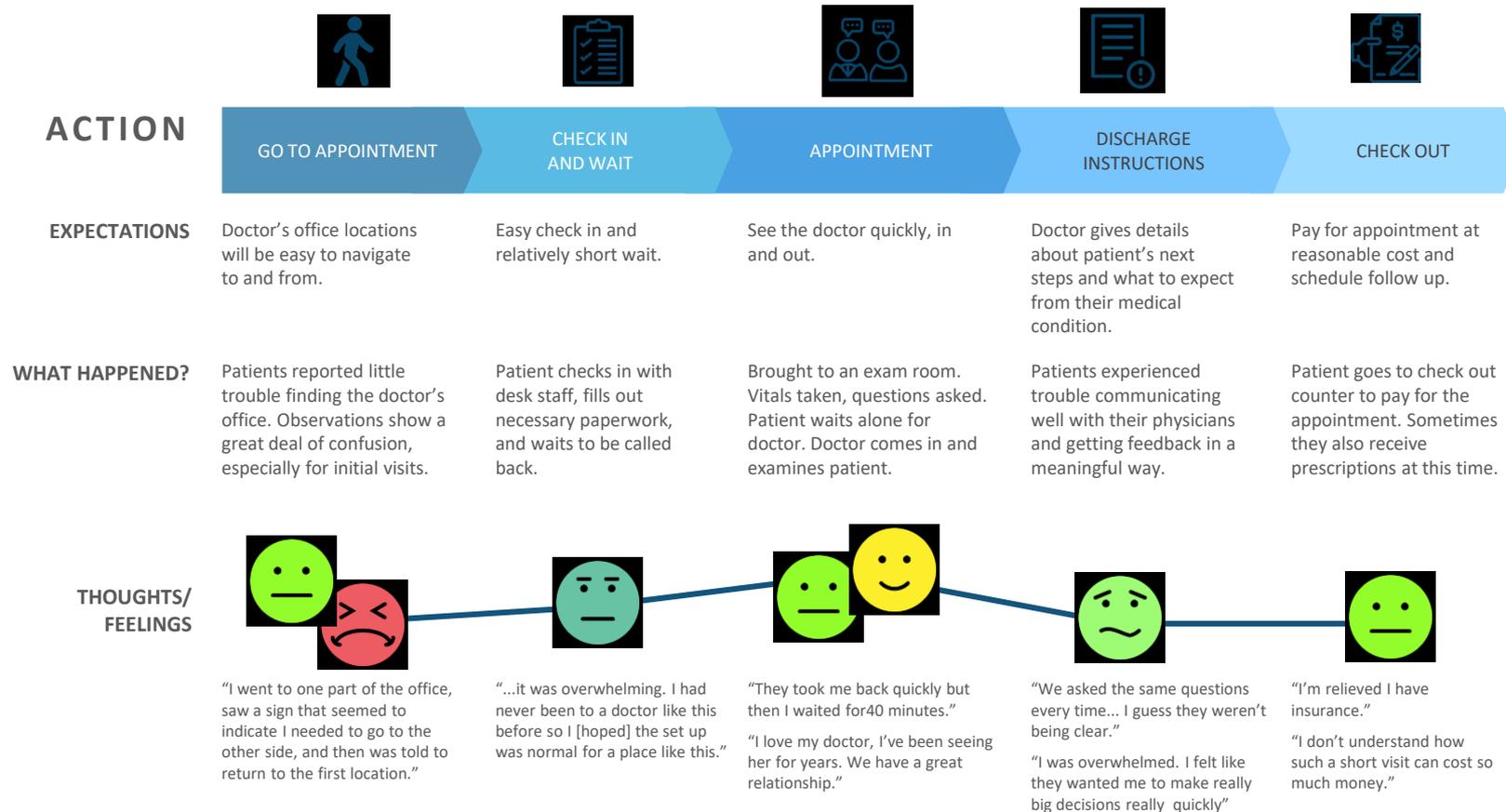
1. <https://nrchealth.com/2016-us-health-care-statistics-data-state-demographics/>

2. <https://nrchealth.com/wp-content/uploads/2018/12/2019-Healthcare-Consumer-Trends-Report.pdf>

COMMON PATIENT JOURNEY

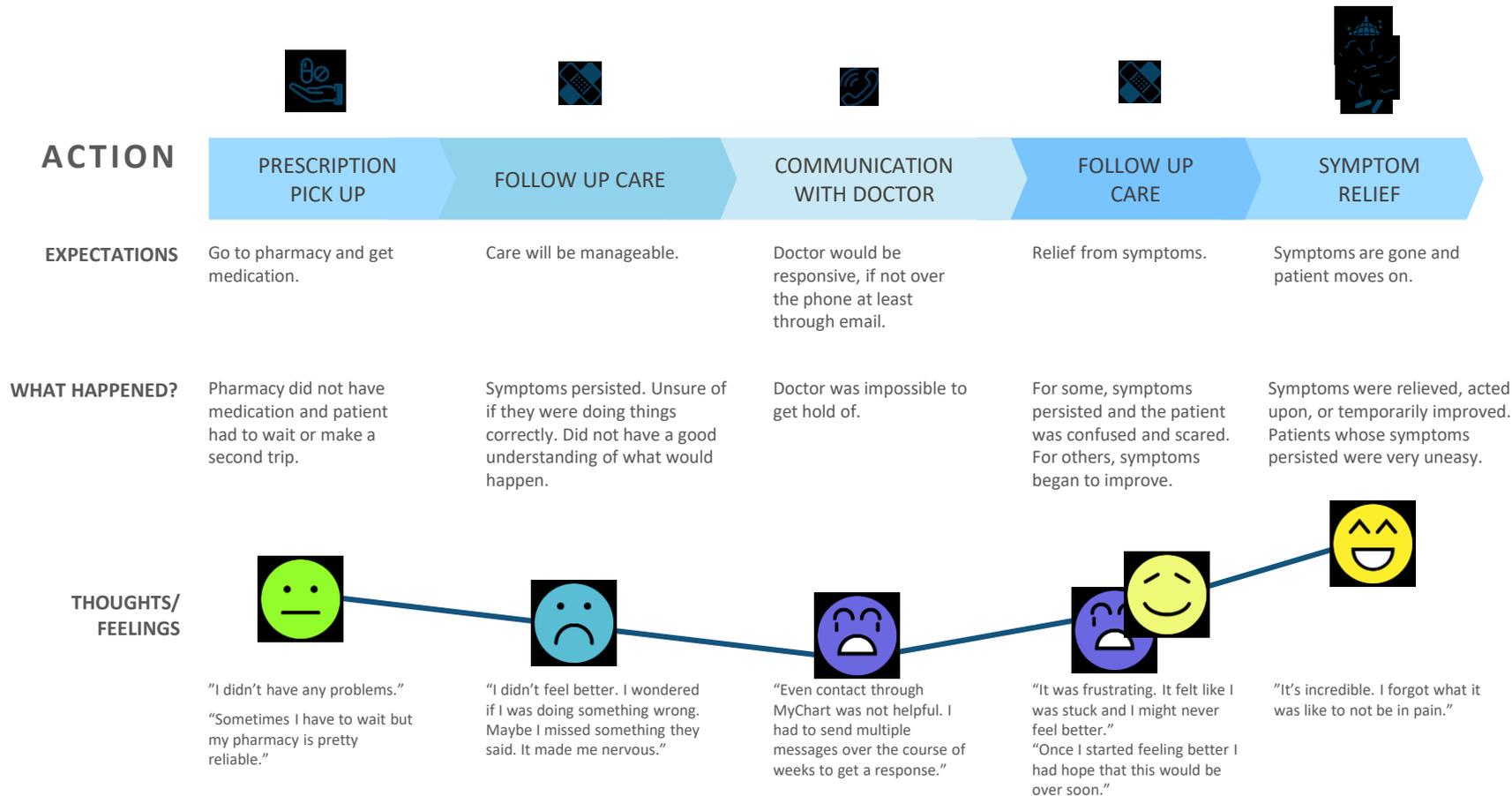


COMMON PATIENT JOURNEY



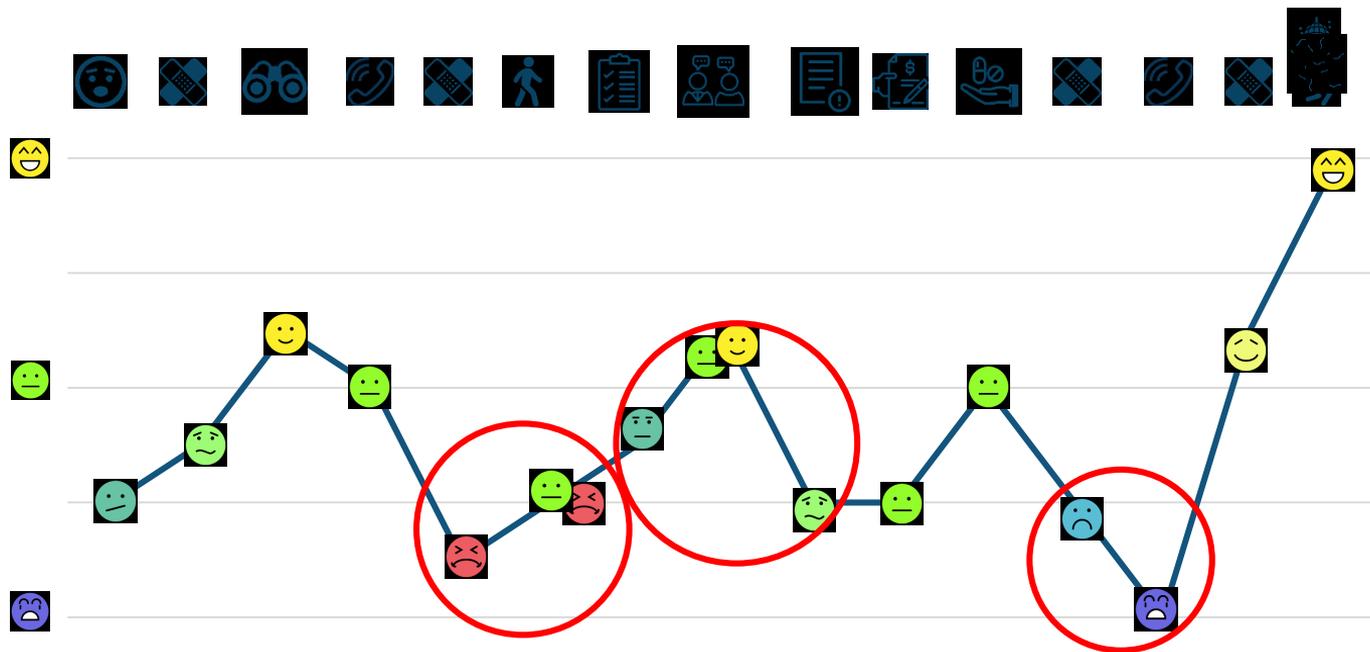
CONTINUED

COMMON PATIENT JOURNEY



HOW TO IDENTIFY PAIN POINTS

FOCUS ON THE EMOTIONAL JOURNEY



IDENTIFYING OPPORTUNITIES

Understand your patients' ideal health care experiences.

What do they need that they may not even know they can ask for?



ACTION

GO TO APPOINTMENT

CHECK IN AND WAIT

EXPECTATIONS

Doctor's office locations will be easy to navigate to and from.

Easy check in and relatively short wait.

WHAT HAPPENED?

Patients reported little trouble finding the doctor's office. Observations show a great deal of confusion, especially for initial visits.

Patient checks in with desk staff, fills out necessary paperwork, and waits to be called back.

THOUGHTS/ FEELINGS



"I went to one part of the office, saw a sign that seemed to indicate I needed to go to the other side, and then was told to return to the first location."

"...it was overwhelming. I had never been to a doctor like this before so I [hoped] the set up was normal for a place like this."



HOW A DESIGN MINDSET CAN CHANGE THE PATIENT JOURNEY

“there is a big technological gap between how patients interact with their doctor's offices, and how they manage the rest of their lives...”⁶

“Health care systems require continuous innovation... However... stakeholders are not always considered when new interventions or system processes are designed, which results in products that remain unused because **they do not account for human context, need, or fallibility...**” – CDC, *Preventing Chronic Disease*, 27 September 2018



CASE STUDY 1: SHUTTLE TRACKER

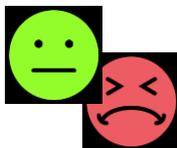


CASE STUDY 1: SHUTTLE TRACKER



GO TO APPOINTMENT

Patients reported little trouble finding the doctor's office. Observations show a great deal of confusion, especially for initial visits.



"I went to one part of the office, saw a sign that seemed to indicate I needed to go to the other side, and then was told to return to the first location."

Jefferson Health's Center City campus in Philadelphia is comprised of 12 buildings spread across 5 square city blocks (0.3 square miles).

7%

Adults unable to walk 0.25 miles³

16.1%

Adults who have difficulty with any physical functioning³

3,700,000

Jefferson Health outpatients in 2018.

3. <https://www.cdc.gov/nchs/fastats/disability.htm>

4. <https://www.census.gov/newsroom/facts-for-features/2017/cb17-ff08.html>



CASE STUDY 1: SHUTTLE TRACKER PROBLEM



Many patients and patrons of Jefferson Health **were not aware** of the campus shuttle.

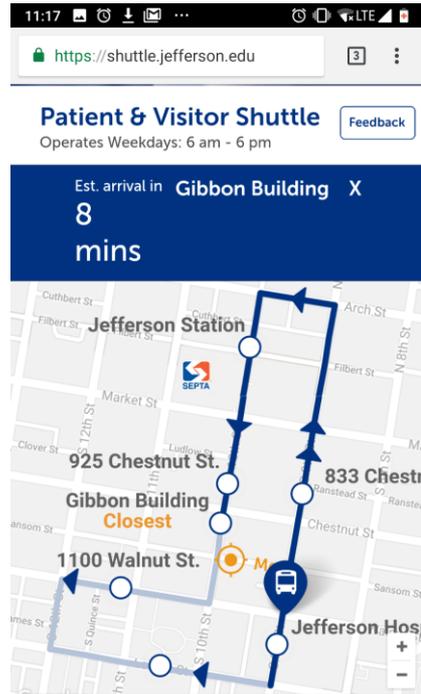


Drivers expect riders to know when to be outside, and to be there waiting. **They will not stop if they do not see someone waiting for the shuttle.**

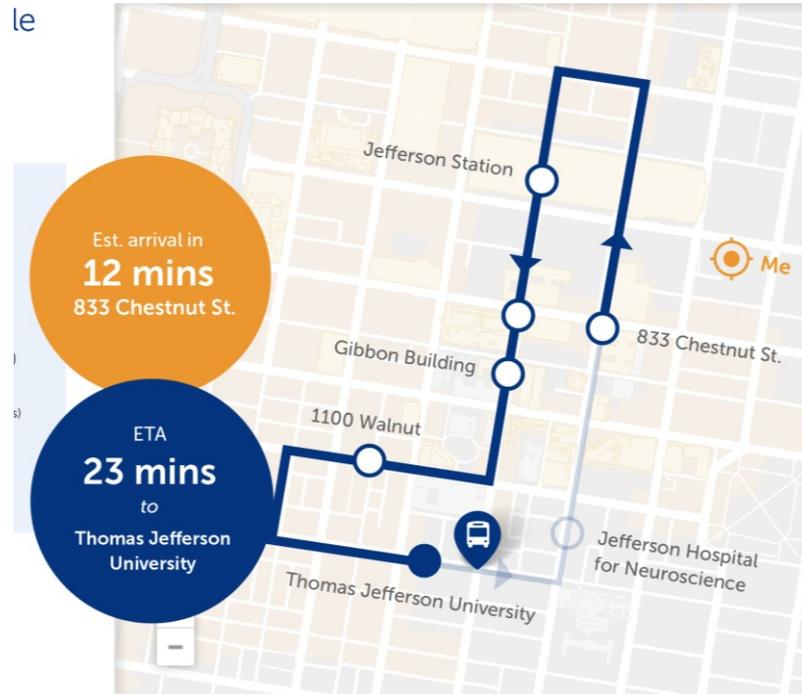


Because there is no set schedule, patients and visitors using the shuttle were forced to **wait outside without any idea of when the shuttle would arrive next.**

CASE STUDY 1: SHUTTLE TRACKER SOLUTION



Mobile view



Desktop view

CASE STUDY 1: SHUTTLE TRACKER IMPACT

Based on our most recent data, ridership has increased by at least

66.67%

”

“Once I put the signs out, riders know that the bus is running, and that I’ll be there soon.”

- Clyde, Morning Driver for Center City Route

”

“We don’t have a tracker for this route. If I had known when the bus would come, I would have stayed on the clock for 10 more minutes.”

-Rider, Methodist Route

The success and popularity of our Center City project has created demand for shuttle trackers for all other Jefferson campus shuttles.

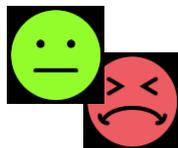


CASE STUDY 1: SHUTTLE TRACKER IMPACT



GO TO APPOINTMENT

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"I went to one part of the office, saw a sign that seemed to indicate I needed to go to the other side, and then was told to return to the first location."



GO TO APPOINTMENT

Patients feel supported by their healthcare system and appreciate the extra mile to make going to the doctors office that much more accessible of a journey.



"I use the tracker every day so that I don't have to wait outside."

-Rider, Center City Loop



CASE STUDY 2: KNOCK, SIT, ASK



CASE STUDY 2: KNOCK, SIT, ASK PROBLEM

“Doctors tend to overestimate their abilities in communication...
75% of the orthopedic surgeons surveyed believed that they
communicated satisfactorily... but only **21%** of the patients reported
satisfactory communication with their doctors.”⁸

“physicians don’t have the support they need to sustain good patient
communication skills...”⁹

“a positive doctor-patient relationship can have statistically significant effects on
‘hard health outcomes’ ...”⁹



8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096184/>

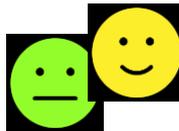
9. <https://health.usnews.com/health-news/patient-advice/articles/2015/04/20/why-nice-doctors-are-better-doctors>

CASE STUDY 2: KNOCK, SIT, ASK PROBLEM



APPOINTMENT

Brought to an exam room. Vitals taken, questions asked. Patient waits alone for doctor. Doctor comes in and examines patient.



“They took me back quickly but then I waited for 40 minutes.”

“I love my doctor, I’ve been seeing her for years. We have a great relationship.”



DISCHARGE INSTRUCTIONS

Patients experienced trouble communicating well with their physicians and getting feedback in a meaningful way.



“We asked the same questions every time... I guess they weren’t being clear.”

“I was overwhelmed. I felt like they wanted me to make really big decisions really quickly”

“It's really frustrating here... I don't understand why they are keeping me here. I could be just sitting here at home. I'm confused and overwhelmed. I don't know what's going on! All these tests...”

-Patient in ACE unit at Methodist Hospital



CASE STUDY 2: KNOCK, SIT, ASK SOLUTION

Hospital stays can be overwhelming.

1. Write down your questions
2. Wait for your doctor's next visit
3. Ask, so you can understand

Tell Me...

- What's my care plan for today?
- Can you explain my diagnosis?
- What do my test results mean?
- When will it be safe for me to go home?
-
-
-

To You and Your Loved Ones,
What Medical Questions Can
We Answer?



CASE STUDY 2: KNOCK, SIT, ASK IMPACT

Press Ganey scores in the ACE Unit at Methodist Hospital have increased since implementation...

↑ Communication with Doctors

↑ Discharge Information

↑ Physician Scores



CASE STUDY 2: KNOCK, SIT, ASK IMPACT



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CASE STUDY 2: KNOCK, SIT, ASK IMPACT



APPOINTMENT

Patient is able to have a meaningful conversation with the doctor in which every question they have is addressed and answered clearly.



“My wife has been in and out of the hospital for years...We would do something like this. We did forget a lot of our questions. And I always missed the doc [checking in].”
-Patient in ACE Unit at Methodist Hospital

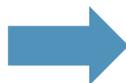


DISCHARGE INSTRUCTIONS

Patients understand how to continue treatment and what to expect moving forward.



“My daughter handles all my healthcare issues.... This looks like something she would use... she would like to see it.”
-Patient in ACE Unit at Methodist Hospital



CASE STUDY 3: SKCC KIOSKS



CASE STUDY 3: SKCC KIOSKS PROBLEM



CHECK IN AND WAIT

Patient checks in with desk staff, fills out necessary paperwork, and waits to be called back.



"...it was overwhelming. I had never been to a doctor like this before so I [hoped] the set up was normal for a place like this."



FOLLOW UP CARE

Symptoms persisted. Unsure of if they were doing things correctly. Did not have a good understanding of what would happen.



"I didn't feel better. I wondered if I was doing something wrong. Maybe I missed something they said. It made me nervous."

Treatment

Questions - "What can I bring?", "Is this working?"

Emotions – Depression, Guilt, Weakness, Isolation

Remission

Questions - ...

Emotions – Relief, Lost, Paranoia, Worry

Recurrence

Questions – "What symptoms should I look for now?", "Will it come back?"

Emotions – Triumph, Relief, Worry, Paranoia

63%

"Patients said that the most stressful thing about going to their MD was waiting.⁶"



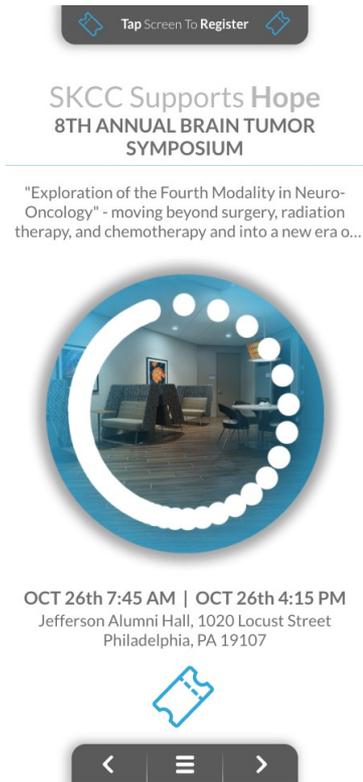
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⁶ <https://www.cnn.com/2016/04/05/most-stressful-part-of-doctors-visit-the-wait-says-survey.html>

CASE STUDY 3: SKCC KIOSKS SOLUTION

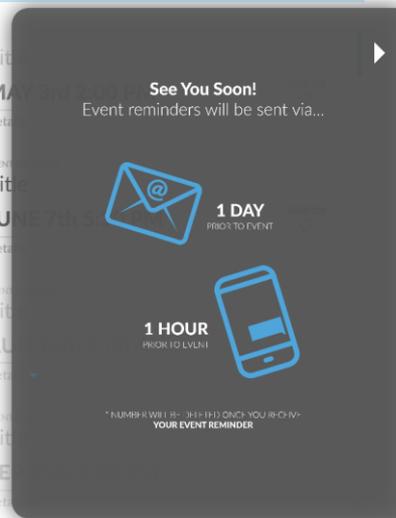


Kiosk home screen



Event detail screen

EVENTS @ SKCC We Support Hope



FREE & FOR EVERYONE
Register Now Or Online @ jskcc.org/community

Event registration confirmation



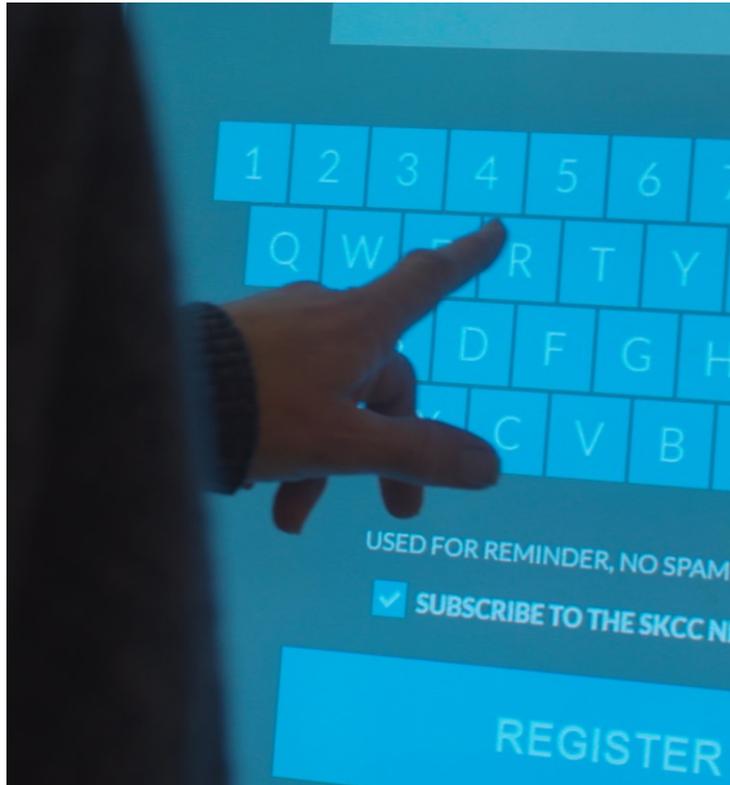
EVENTS @ SKCC Support Hope

- Empowering Survivors Support Group
SAT 10:00 AM
- The Cancer Health and Language Clinic with Dr. Ching-Ji
SAT 10:00 AM
- Small Group Support Group
SAT 10:00 AM
- The Voice Club of Greater Chicago
SAT 10:00 AM
- Network Support Group
SAT 10:00 AM

AVAILABLE FOR EVERYONE
Support Group



CASE STUDY 3: SKCC KIOSKS IMPACT



Before Oct. 2018

Patient awareness of opportunities for learning, support, and other events were minimal.

Oct. 1, 2018 – Jan. 2, 2019

237 interactions with our kiosks.

Event registrations increased by 16.69%

“People really like the convenience of it. They can register for more than one event at a time...”

-Employee at the SKCC Welcome Center

CASE STUDY 3: SKCC KIOSKS IMPACT



CHECK IN AND WAIT

Patient checks in with desk staff, fills out necessary paperwork, and waits to be called back.



"...it was overwhelming. I had never been to a doctor like this before so I [hoped] the set up was normal for a place like this."



FOLLOW UP CARE

Symptoms persisted. Unsure of if they were doing things correctly. Did not have a good understanding of what would happen.



"I didn't feel better. I wondered if I was doing something wrong. Maybe I missed something they said. It made me nervous."



CASE STUDY 3: SKCC KIOSKS IMPACT



CHECK IN AND WAIT

Check in and peruse Kiosks. Learn about events and support from SKCC while waiting for appointment.



FOLLOW UP CARE

Realistic expectations for long term care. Continuous support and education from healthcare institution throughout treatment journey.



“We encourage people to come here and they’re always glad when they do.”

-Employee at SKCC Welcome Center



“[The events that SKCC offers] improve patients’ recovery and emotional wellbeing.”

-Researcher for Palliative Care at Jefferson Health



IMPACT OF DESIGN IN HEALTHCARE



IMPACT OF DICE AT JEFFERSON HEALTH

1.46M

Raised via online
donation app

7.5M

Saved by staff online
training

10K⁺

Physician hours saved
by online training

10K⁺

App downloads

1M⁺

Yearly saving for
staffing costs in ER

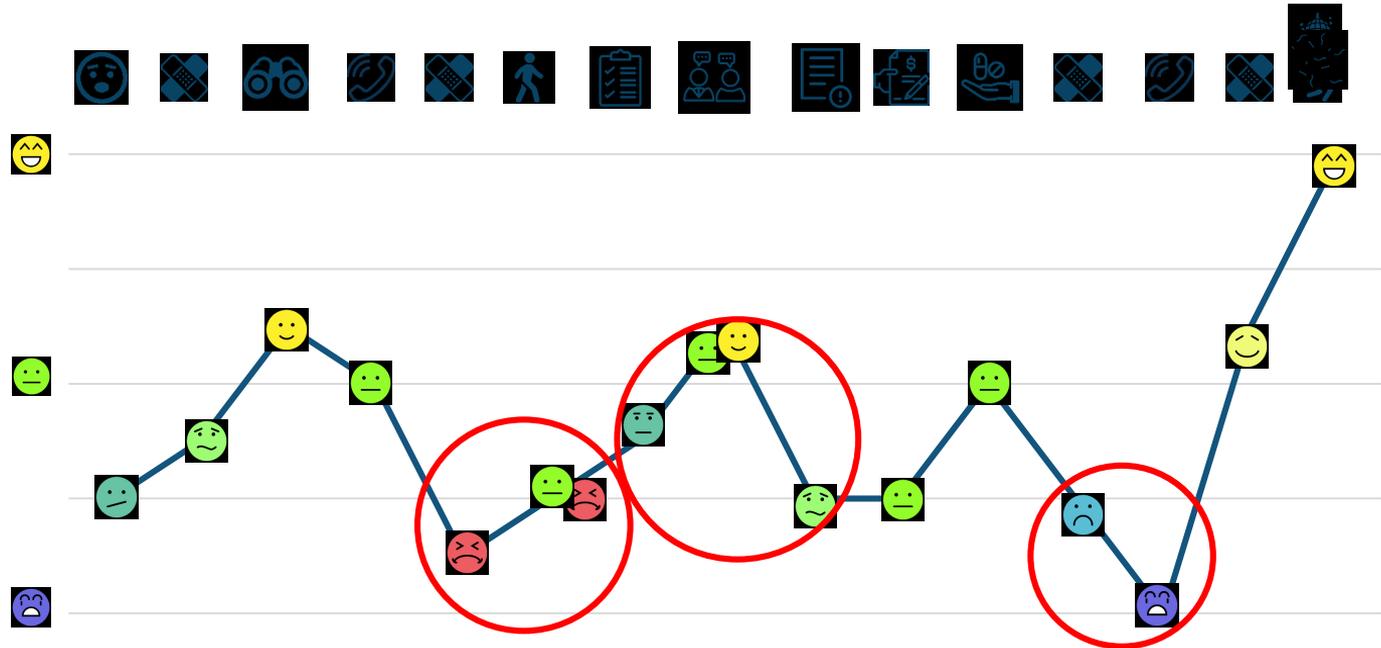
CMS



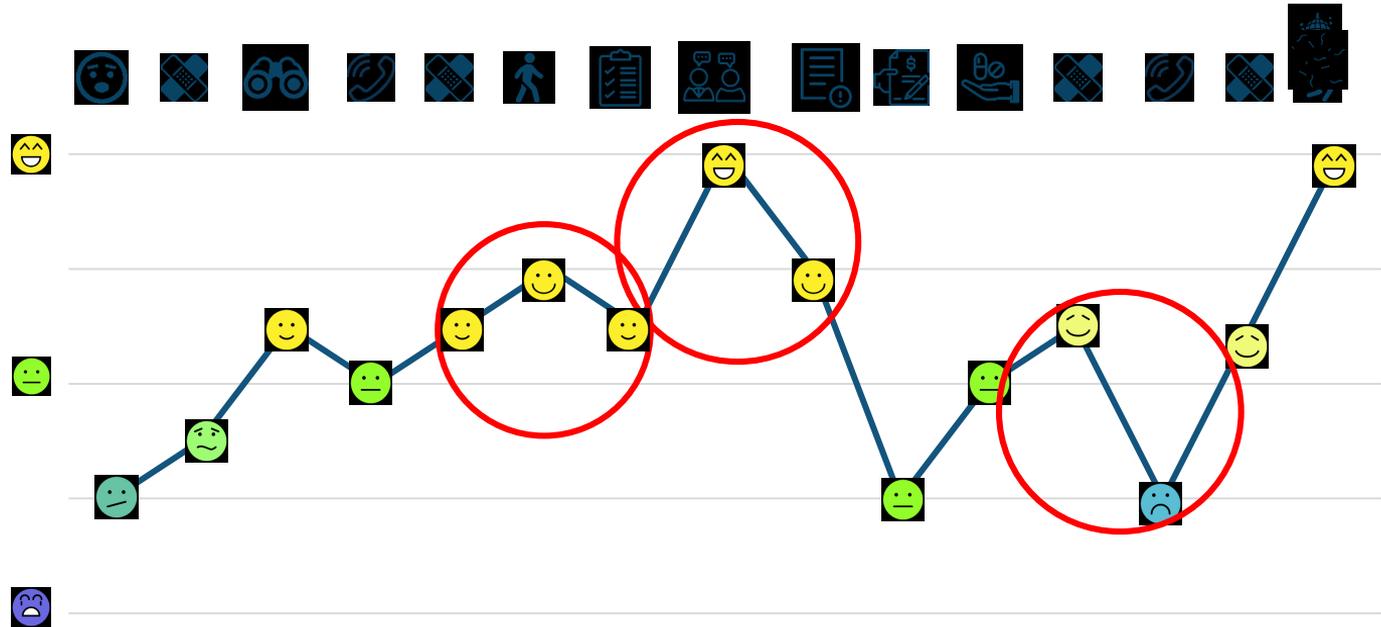
Rating increase in
18 months by
rounding app



ORIGINAL PATIENT JOURNEY



UPDATED PATIENT JOURNEY



SERVICE DESIGN FOR HEALTHCARE

BUSINESS CASE

Research by **AHRQ** has proven that increasing patient and family engagement has a multitude of benefits including:

- Improve **quality and safety**
 - “patients and families... become allies... through ‘informed choices, safe medication use, infection control initiatives, observing care processes, reporting complications, and practicing self-management.’”⁵
- **Improve CAHPS scores**
- Improve **patient outcomes**
 - “emotional health, symptom resolution, functioning, pain control, and physiologic measures such as blood pressure and blood sugar levels.”⁵
- Increase **employee satisfaction and retention**
- **Reduce errors**
- **Improve financial performance**
 - “patient and family engagement ‘consistently predicts hospital performance on an array of crucial business outcomes’”⁵



THE EQUATION FOR TRANSFORMATION

TRANSFORMATION

Great things in business are never done by one person. They're done by a team of people.

STEVE JOBS



Great Teams

From design to development to support, inspired, motivated, and agile teams move us into the future



Great Platforms

Innovation must not be the currency of a few, but the combined wealth of many and platforms can make this a reality



Great Partners

Our consumers, vendors, donors, and community are our partners; we develop synergistic relationships and grow together

Resources

1. <https://nrchealth.com/2016-us-health-care-statistics-data-state-demographics/>
2. <https://nrchealth.com/wp-content/uploads/2018/12/2019-Healthcare-Consumer-Trends-Report.pdf>
3. <https://www.cdc.gov/nchs/fastats/disability.htm>
4. <https://www.census.gov/newsroom/facts-for-features/2017/cb17-ff08.html>
5. https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/howtogetstarted/How_PFE_Benefits_Hosp_508.pdf
6. <https://www.cnn.com/2016/04/05/most-stressful-part-of-doctors-visit-the-wait-says-survey.html>
7. <https://www.ncbi.nlm.nih.gov/pubmed/8953956>
8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096184/>
9. <https://health.usnews.com/health-news/patient-advice/articles/2015/04/20/why-nice-doctors-are-better-doctors>
10. https://www.cdc.gov/pcd/issues/2018/18_0128.htm



THANK YOU!

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