

# ENGAGING PATIENTS/FAMILIES *BEFORE, DURING & AFTER* AN ENCOUNTER USING DIGITAL HEALTH

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# Presentation Goals

- Benefit of Patient/Family Engagement
- Our Work
  - Goals
  - Outcomes
  - Lessons Learned



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## History

In October 2018

- Team will be 2 years old
- All Portfolio Leaders will be on-boarded 1 year

## Structure

- 20 employees & growing
  - Analysts
  - Designers/Developers
  - Leadership
- Part-time: Clinicians/Research Scientists

## Goals

Deploy innovative digital technologies to

- Transform the way we engage with global communities & patients/families
- Improve clinician & staff experiences to the can deliver care more efficiently and effectively

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# Why Patient/Family Engagement?

## Patient/Family Benefit

### EVIDENCE & POTENTIAL

By Judith H. Hibbard and Jessica Greene

## What The Evidence Shows About Patient Activation: Better Health Outcomes And Care Experiences; Fewer Data On Costs

**DOI:** 10.1377/hlthaff.2012.1061  
HEALTH AFFAIRS 32,  
NO. 2 (2013): 207–214  
©2013 Project HOPE—  
The People-to-People Health  
Foundation, Inc.

## Hospital Benefit

### Key Takeaways

- Patient and family engagement is not a new or separate initiative. It is a critical part of what your hospital is already doing to improve quality and safety.
- Patient and family engagement improves multiple aspects of hospital performance, including quality, safety, financial performance, patient experiences of care, patient outcomes, and employee satisfaction.
- Together, the multiple individual benefits of patient and family engagement lead to improved hospital performance.



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# Robots

## Demonstrated

1. Encouragement for therapeutic behavior
2. Anxiety reduction
3. Positive distraction during procedures



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# Robots: Lessons Learned

- Ask vendor if you can “try before you buy”
- Find department willing to advocate for and “own” robot(s)
- Consider non-clinical use cases as well
  - Interpretation
  - Dance parties
  - Fundraising



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# N/IICU Camera System



- **100 cameras** installed
- Fewer than 5 months after full implementation:
  - **22K** visits to mobile/web application **700 family members** for **330 infants** have used the tool, across **26 states** & **7 countries**
  - **Reduced parental stress/anxiety** ( $p < 0.05$ )

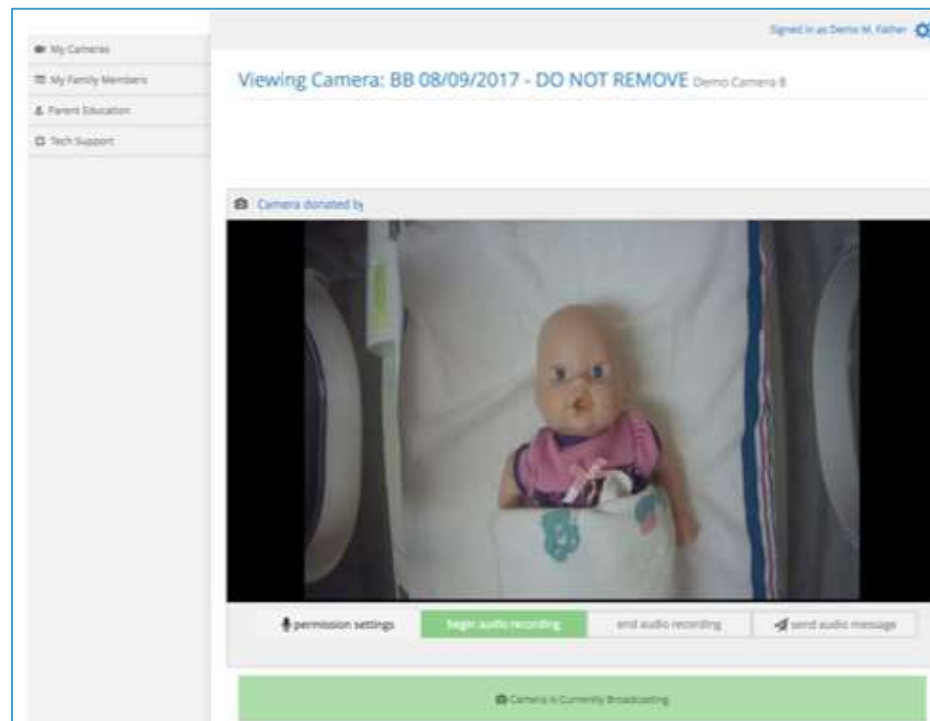
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# N/IICU Camera System: Lessons Learned

- N/IICU leaders must play lead role
- More concern from nurses than anticipated
- Need to repeat “camera off” policy to other clinicians on care team
- Great philanthropic interest



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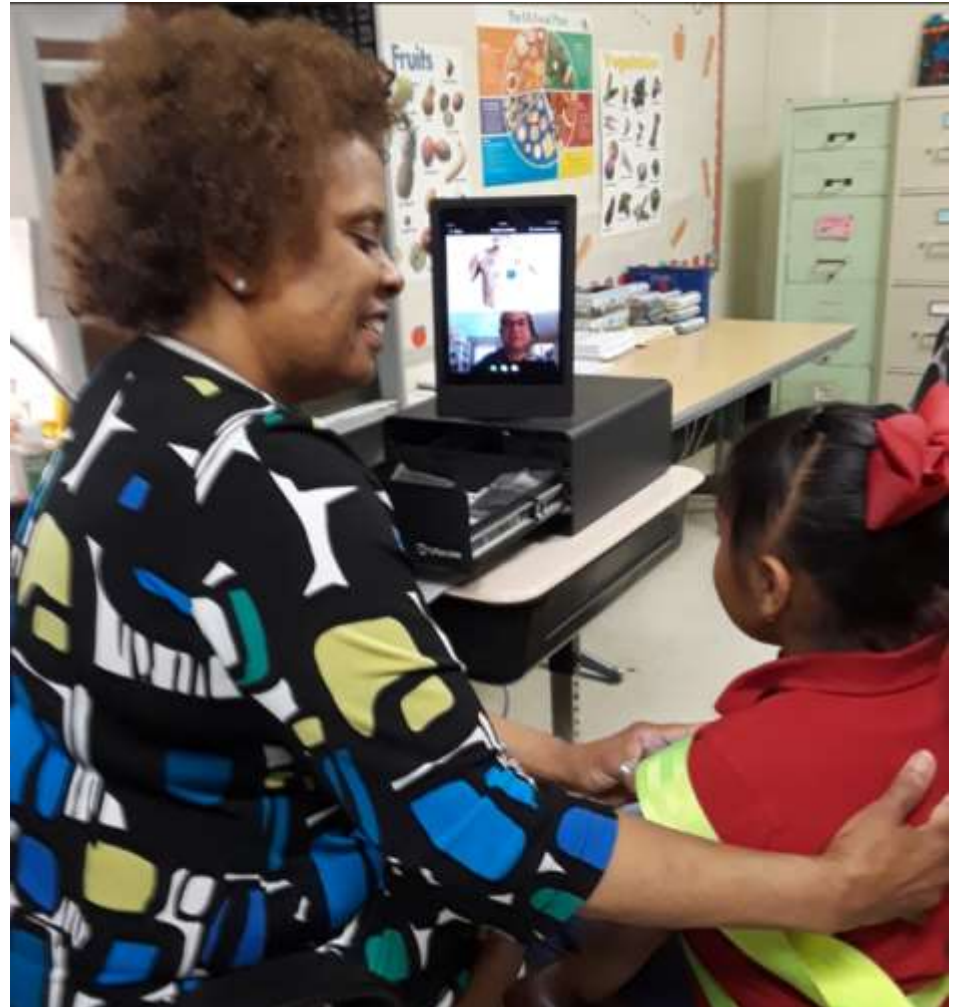
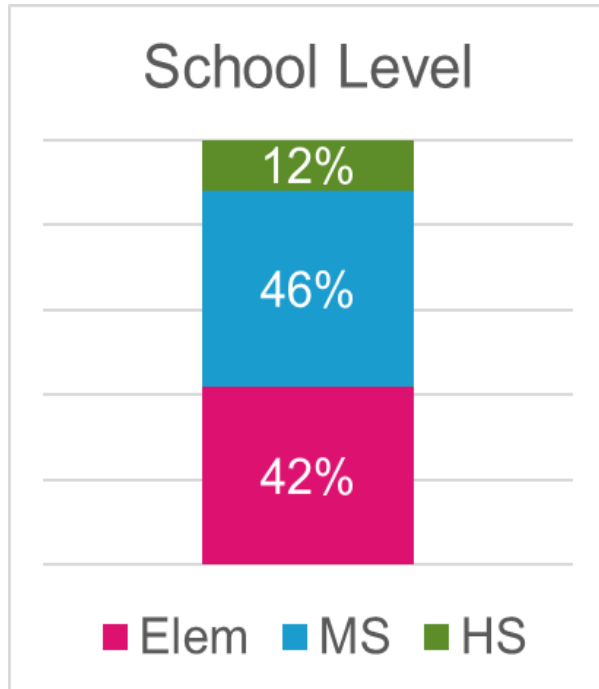
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# School Telehealth

## Enrollment Forms



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# School Telehealth: Lessons Learned

- Fewer enrollment forms from high school
- Assure school nurses
- Community physicians may or may not react
- Telehealth technology does not have to be expensive
- It takes a few years to build enrollment
- Great PR interest



A look at the future of in-school health care



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# MyCHOP Bedside

- Currently being piloted in 5 units
- 121 iPads deployed
- Current features:
  - Happening Soon
  - My health
  - Taking Care of Me
  - Education
  - Entertainment



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# Who are you?



Pat C. Test

Clear all data

Scan another code

## Enterprise iPad rollout

- Approximately 470 additional iPads to be rolled out enterprise wide
- iPad installation to follow room refresh schedule with PCU going first
- Bedside will not be installed initially
- Opportunity to optimize iPad activation

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# Original Wall Mount

- Touch-Pac iPad cases & docking stations
- Did not have USB outlets
- Perched on Corian shelves



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# Piloting New Wall Mount

- Magnetic picture frame Wall Mount
- iPads are in a protective case (passed the 4' drop onto concrete test)
- They are fixed to the wall near the newly installed dual AC/USB outlets
- No removable fire cable or plug
- iPads automatically lock in the dock
- Protrudes 2" from the wall



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Jillian Johannes, BSN, RN  
5E Complex Care Services

*“Having a child in the hospital is very stressful and a significant loss of control as a parent. The iPad and MyCHOP Bedside allows parents to have the ability to gain a sense of control, even if it is for something as small as an iPad.*

*Parents are able to have a ‘hands-on’ view of their child's schedule, medications their child is receiving, even ‘about me’ summaries written by their care team members to make them feel more comfortable about who is taking care of their child.”*

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# MyCHOP Bedside: Lessons Learned

- Decide on a device and case/mount early
- Have a plan for BYOD
- Pediatrics sites have a plan for Adolescent Access
- Plan for provisioning (i.e., Who does it?)

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# MyCHOP Bedside 2.0

- Expand MyCHOP Bedside with new features
  - Let's Eat
  - To Learn
  - A few Questions
  - I would like...

**FUTURE**

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# MyCHOP

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- Communicate with your doctor**  
Get answers to your medical questions from the comfort of your own home
- Request prescription refills**  
Send a refill request for any of your refillable medications
- Access your test results**  
No more waiting for a phone call or letter - view your results and your doctor's comments within days
- Manage your appointments**  
Schedule your next appointment, or view details of your past and upcoming appointments

**MyCHOP Username**  
**Password**

**SIGN IN**

[Forgot Username?](#) [Forgot Password?](#)

**New User?**

**SIGN UP NOW**

FAQs | Signup Help | Clinical Research Study Finder | Privacy Policy | Terms and Conditions  
HIPAA: Protecting Patient Privacy | The Children's Hospital of Philadelphia | Pay Online As A Guest | Default Theme

Download on the App Store | GET IT ON Google Play

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# MyCHOP Statistics

- 200k+ active patients
- 40k+ appointments directly scheduled
- 171k+ Patient Medical Advice requests in FY2018
- 18k+ Medication Renewal Request messages in FY2018
- 90k+ Questionnaires completed in FY2018
- 1.4+ million patient entered questionnaires completed in MyCHOP, Welcome and Epic since 2013
- 201k questionnaires complete in MyCHOP alone
- **27 departments with 65%+ active MyCHOP patients in FY18** (\*\*Qualifier: 500 unique patients seen in FY18\*\*)

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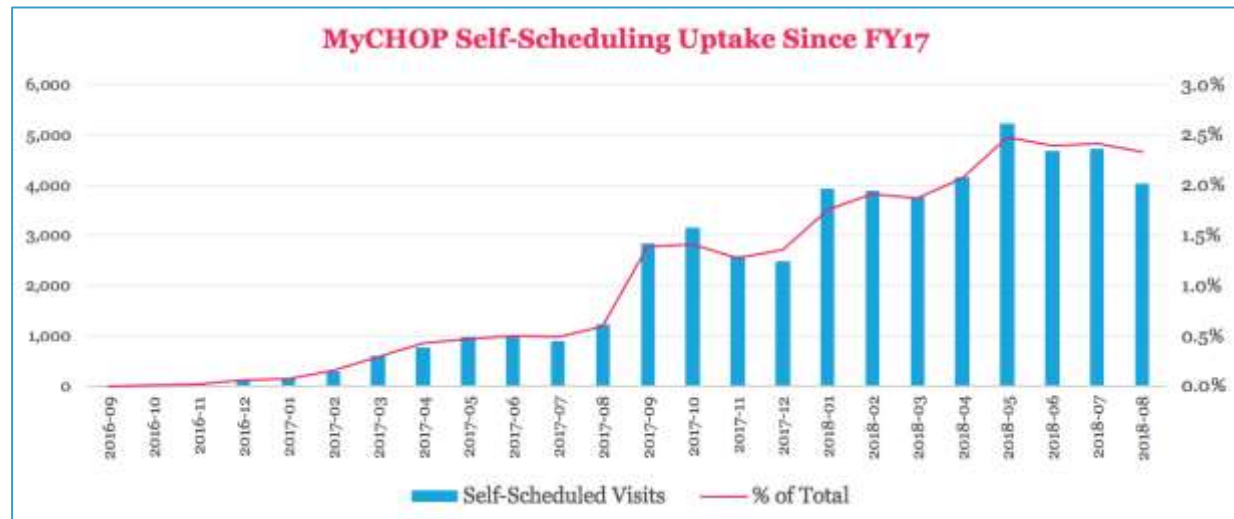
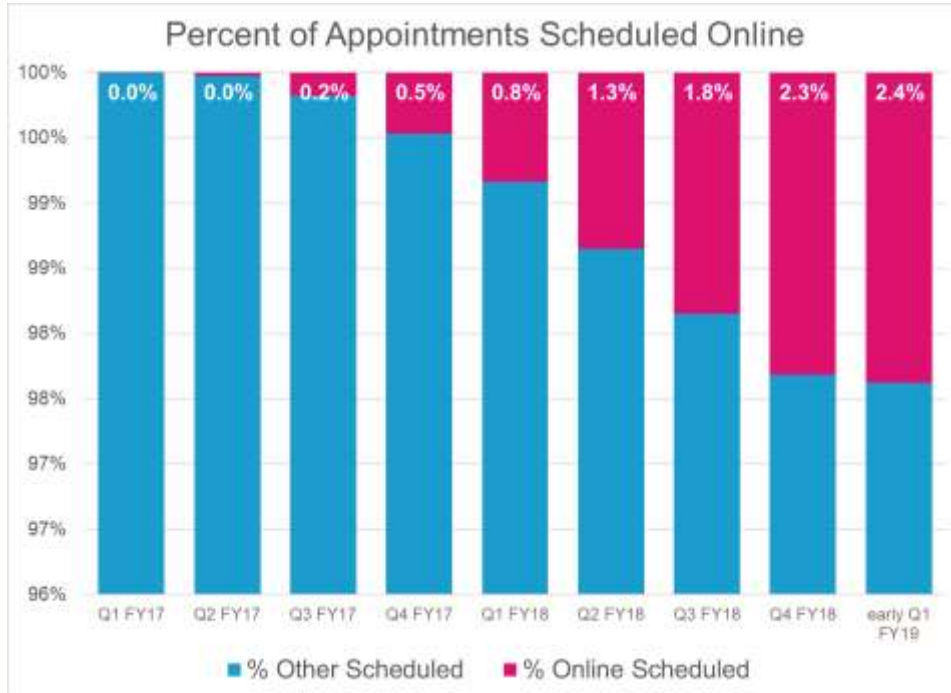
# MyCHOP Direct Scheduling – Active Divisions

- Care Network
- Allergy
- Developmental Peds
- Gastroenterology
- Hematology
- Infectious Disease
- Neurology (Stroke Clinic)
- Orthopaedics
- Plastic Surgery
- Rheumatology
- Adolescent Medicine
- Cardiology
- Endocrinology
- General Surgery
- Immunology
- Metabolism/Mitochondrial med
- Ophthalmology
- Otolaryngology (ENT)
- Pulmonology / Sleep Medicine
- Urology

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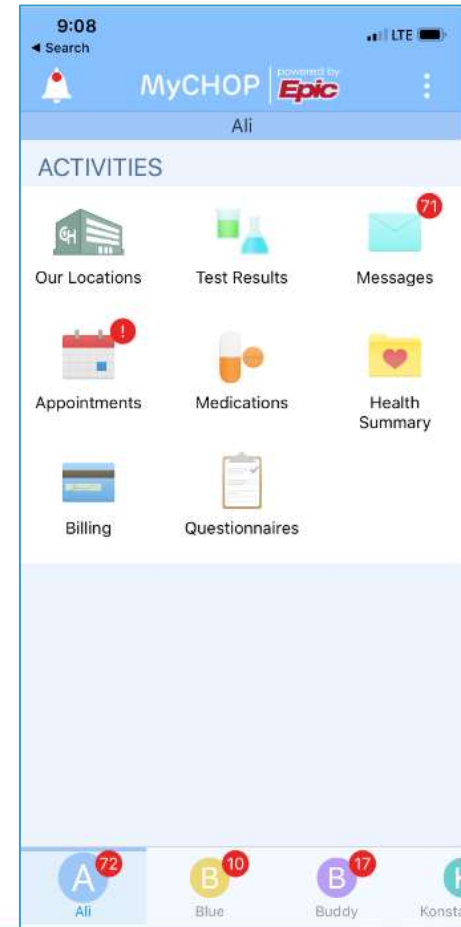
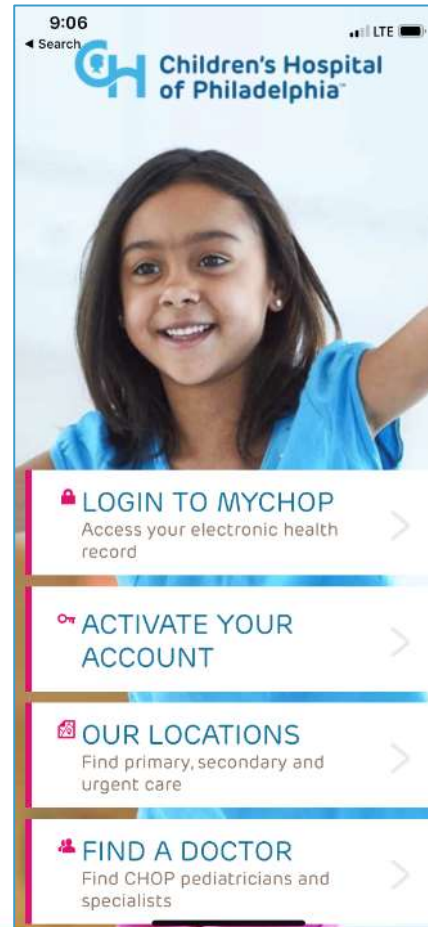
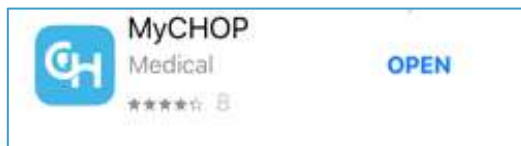
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# Direct Scheduling Adoption



# Custom MyCHOP Mobile App

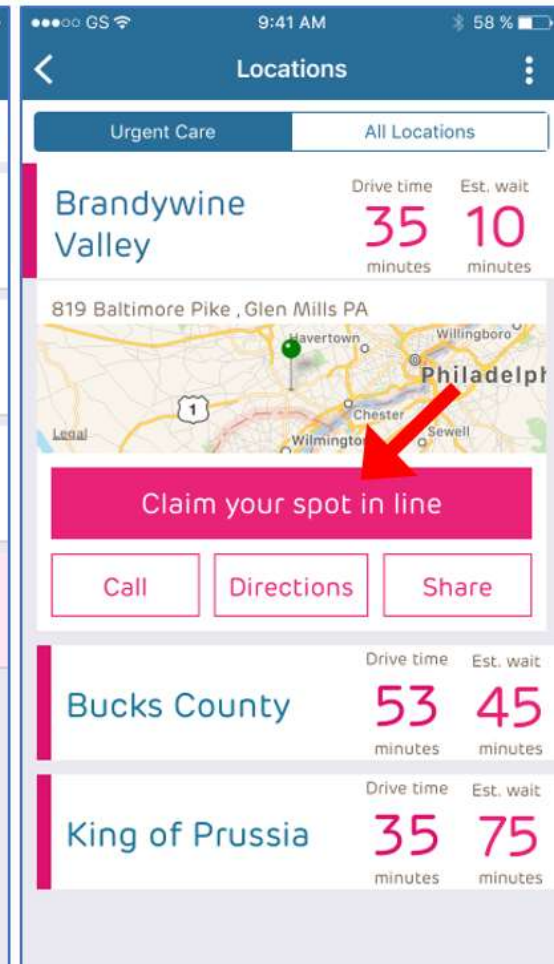
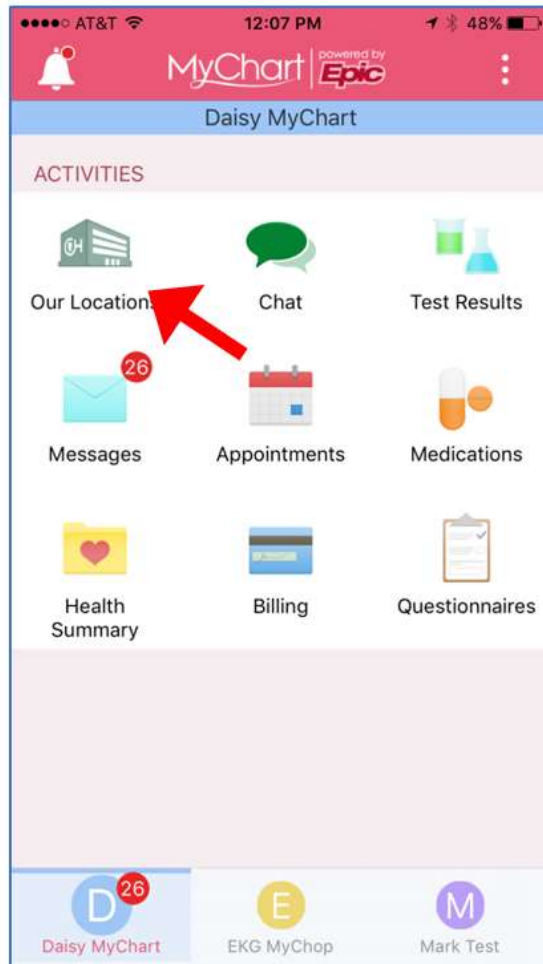
- Available for iOS & Android
- 4k users per month
- With the **Our Locations** feature patients/parents can now:
  - Reserve a spot in line at any Urgent Care center
  - View Urgent Care wait times
  - Find closest CHOP location



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# Custom MyCHOP Mobile App

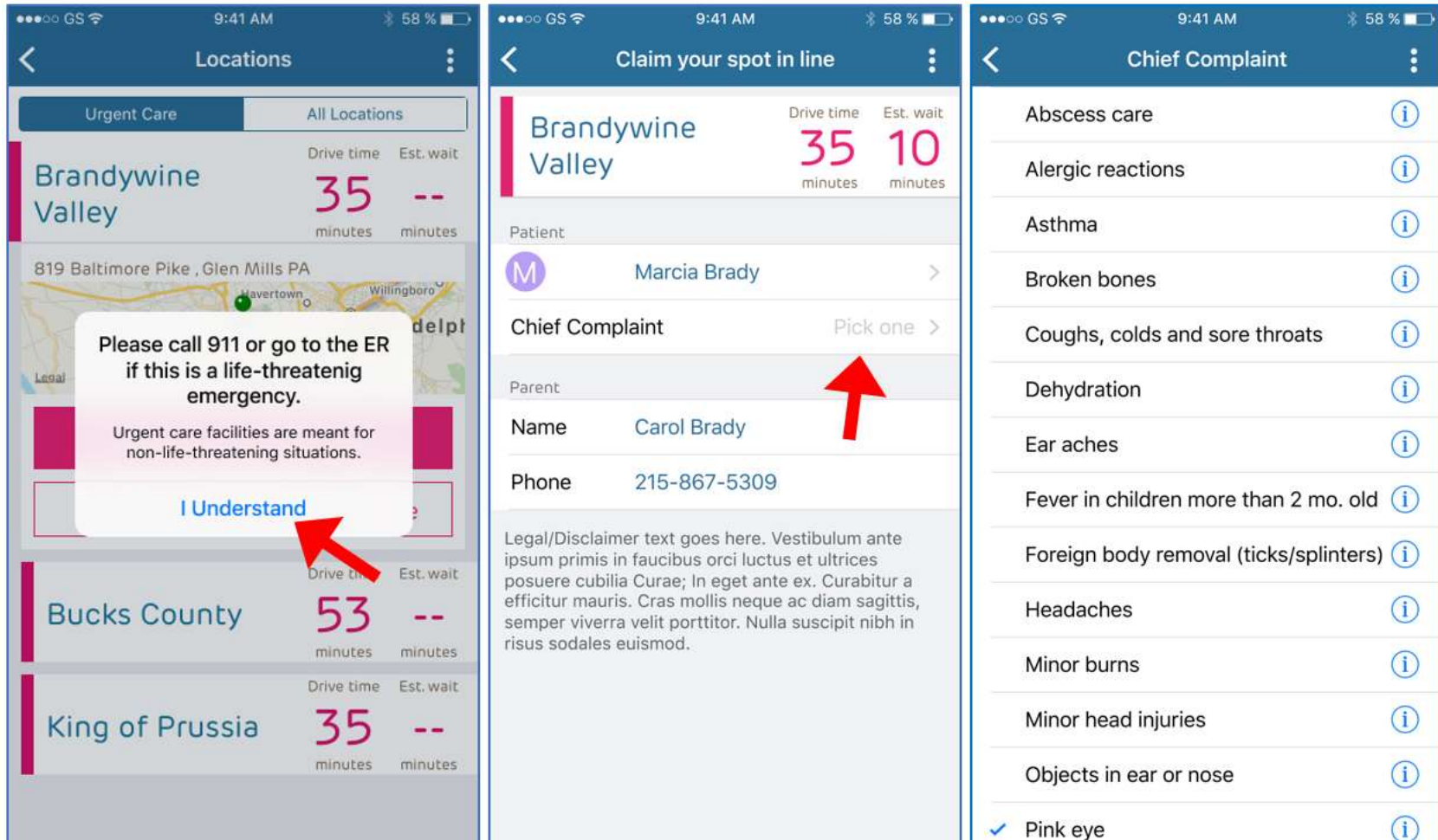


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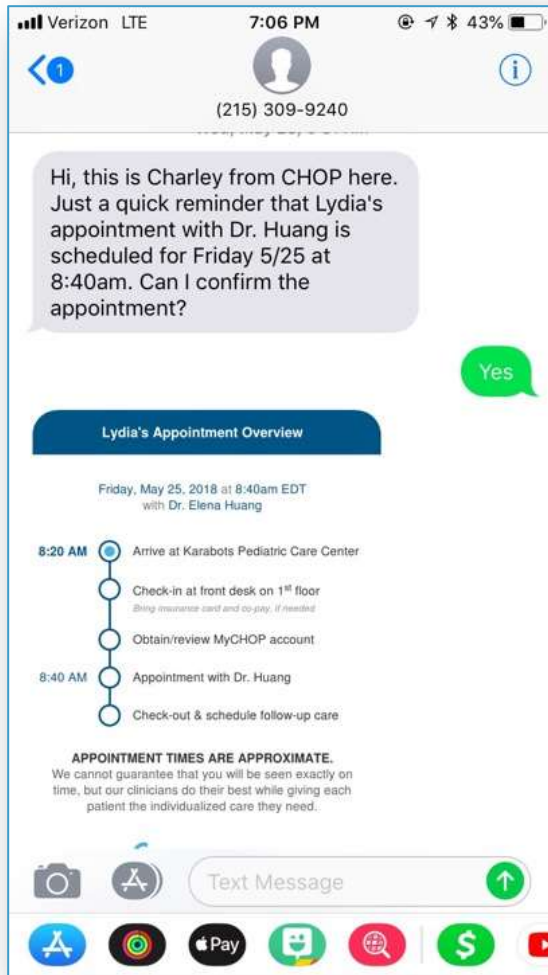
# Custom MyCHOP Mobile App



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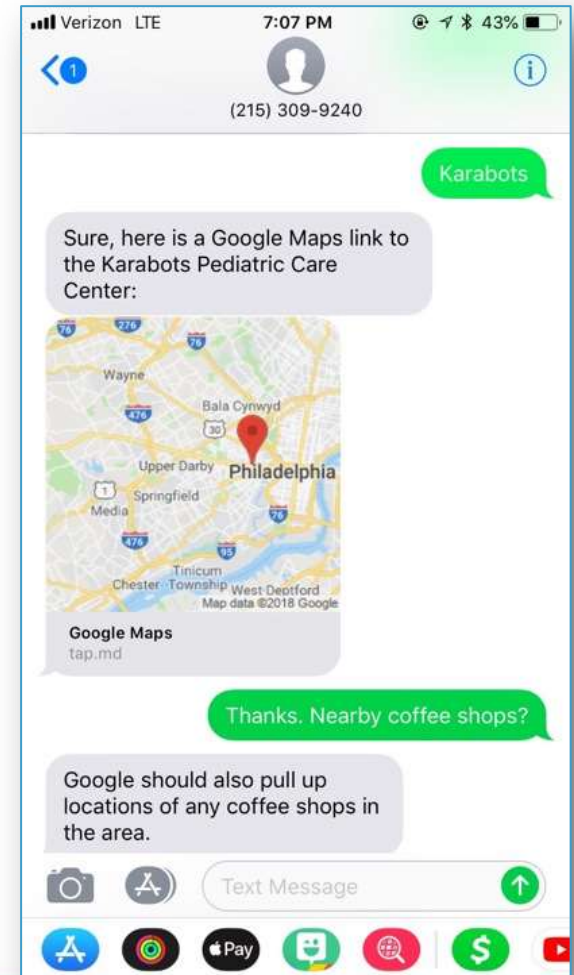
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# Custom MyCHOP Mobile App



Chatbot Charley sent  
**415K appt. reminders**  
& interacted with parents  
140K times - total of **1.2M**  
**messages.**

We now get **additional**  
**24h of advance notice**  
about a patient's intent to  
cancel or keep an appt.



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# MyCHOP Video Visits

## CHOP Employee Telehealth Benefits

- Currently offering MyCHOP video visits for employees' children covered by CHOP insurance using CHOP ED providers. (**Live as of July 2018.**)
  - Availability:
    - **Mon-Fri: 5pm-10pm**
    - **Sat-Sun 10am-10pm**
  - Access is through the existing nurse triage process
- CHOP Benefits will offer video visits for employees and adult dependents using American Well (**target Fall 2018**).

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# Future App Development & Integration

- MedActionPlan Pro
  - Patient Friendly Medication Management Tool
  - Improves Patient Safety and Administration Adherence
- Teledermatology
  - Store and Forward Option for common Dermatology Diagnoses
  - Access to a Pediatric Dermatologist, when in person encounters may have a prolonged wait time.

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# MyCHOP Ambulatory: Lessons Learned

- Have a plan for Marketing
- Online signups are essential
- Training Plan for “In Person” signups
- Pediatric sites need a plan for Adolescent Access

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# LINK2CHOP



## Referring Physician Portal

- Read-only access to referred patients
- Order referrals to CHOP specialists

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# LINK2CHOP

- 130 Referring Practices Live
- 1348 Active Users
- United Arab Emirates Embassy & State Department Live
- 120 referrals ordered since 1/1/2018

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# LINK2CHOP: Future Development

- Research Monitor
- Physician Video Consults

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# LINK2CHOP: Lessons Learned

- Choose “Opt Out” for electronic access for providers
- Give providers as much access to information and ordering as possible

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# BUG (BetaCHOP User Group)

- Harness energy of stakeholders willing to collaborate on innovation (early adopters)
- Provide them access to:
  - Digital prototypes
  - RATs (Risky Assumption Tests)
  - MVPs (Minimum Viable Products)
- Recruit/Engage via:
  - Surveys/questionnaires
  - Social media & [www.chop.edu](http://www.chop.edu)
  - Events

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# BUG: Lessons Learned

- Recruitment stage taking longer than expected
  - Different PR/Marketing story (no outcome yet)



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# Questions?

Email:

[digitalhealth@email.chop.edu](mailto:digitalhealth@email.chop.edu)



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