





Hangry is a clever portmanteau of hungry and angry, and an adjective that describes being irritable due to hunger.



hours





THE SHIFT

Inside the Home of Instant Pot, the Kitchen Gadget That Spawned a Religion

The electric multicooker is a true viral phenomenon. We went to the company's Canadian headquarters to learn why.



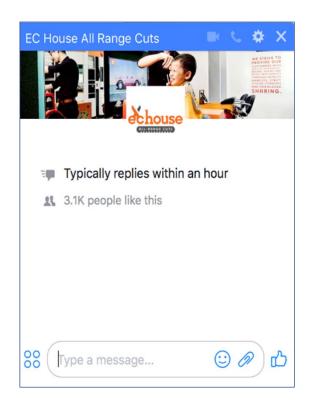
- Robert Wang, PhD in Computer Science, particularly in Artificial Intelligence
- Laid off from Nortel (tech firm) in 2008
- "...quality food in less time, promoting better eating and reducing the consumption of fast food."
- 18 months and \$350,000 initial investment
- Sales sluggish until introduced to 200 food influencers on Amazon
- Revenue doubling every year since 2012
- Facebook Page 1.3 million members

HAINANESE CHICKEN RICE IN AN INSTANT POT



18 minutes

- Saute the aromatics until fragrant with saute mode on Instant Pot
- Add the rice and stir to mix everything.
- Add chicken stock and salt
- Arrange the chicken pieces on top of the rice, skin side down.
- Pressure cook on high for 3 minutes and then wait 10
 minutes to release pressure. The residual heat will continue
 to cook the chicken, so no worries about the chicken being
 raw
- Unlock the lid and carefully remove the chicken pieces and let them rest for 5 minutes before slicing
- Fluff the rice with a fork and serve with the chicken slices and garlic ginger sauce on the side
- Eat







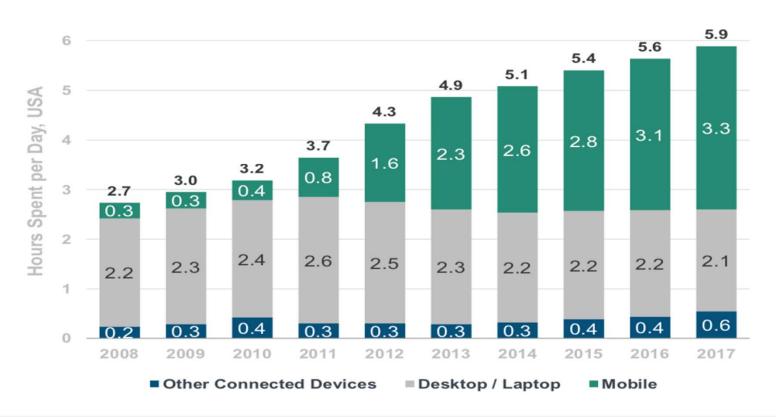
Objectives

- Review key consumer trends that will drive patient expectations
- Explore examples of digital transformation of patient experience
- Understand unintended consequences of digital transformation and potential countermeasures
- Review what we can do as leaders to contribute to digital transformation

Megatrends

Digital Media Usage @ +4% Growth... 5.9 Hours per Day (Not Deduped)

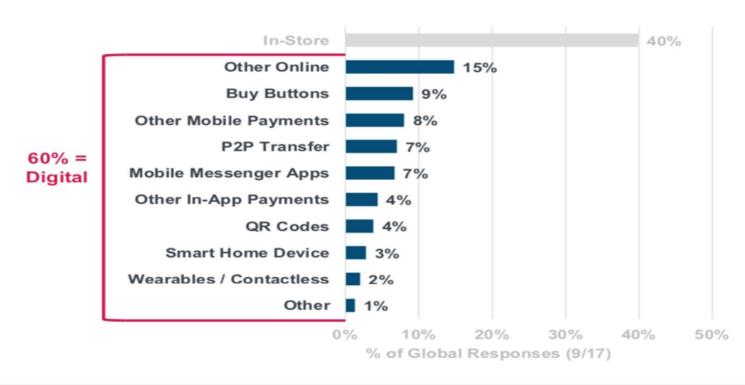
Daily Hours Spent with Digital Media per Adult User

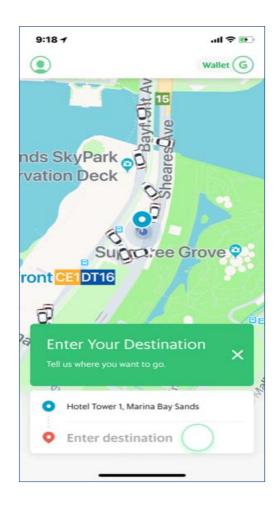


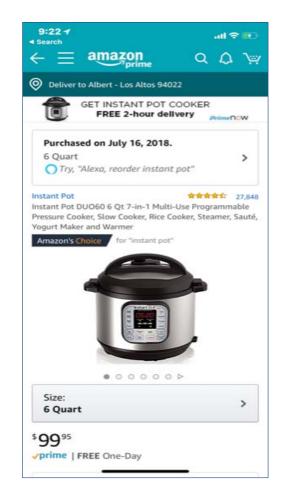
Payments = Digital Reach Expanding...

Transactions by Payment Channel

Thinking of your past 10 everyday transactions, how many were made in each of the following ways?











"Digital" common features:

Simple user interfaces



Highly personalized

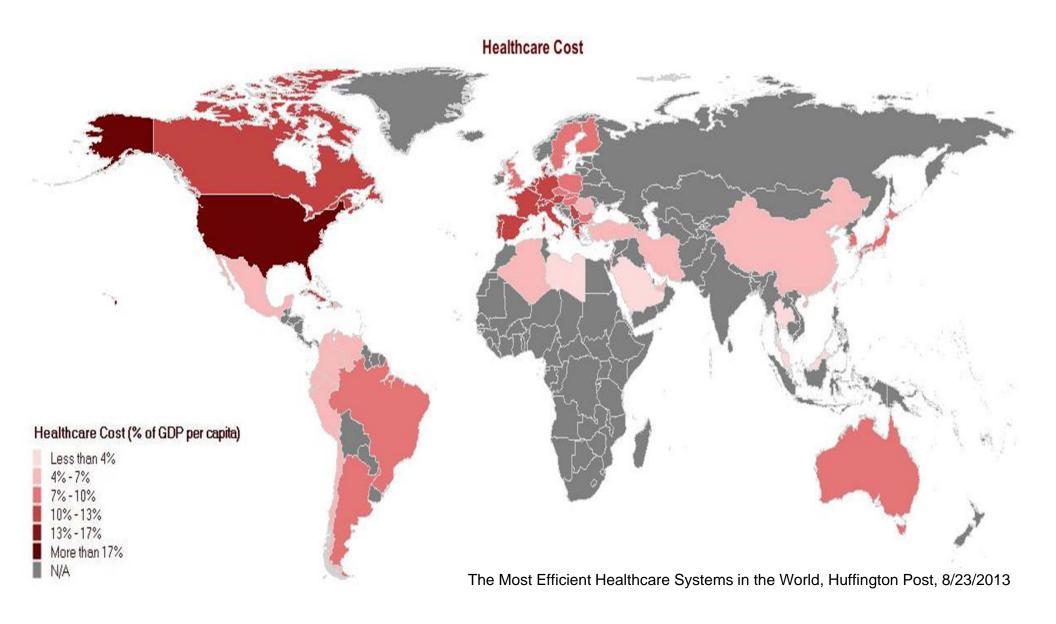
Infused with transparency



Driven by data

Key stat:

79% U.S. consumers
Willing to Share
Personal Data For
Clear Personal Benefit
-Deloitte



USA Healthcare Insurance Costs = Rising for All... Consumers Paying Higher Portion @ 18% vs. 14% (1999)...

Annual Health Insurance Premiums vs. Employee Contribution

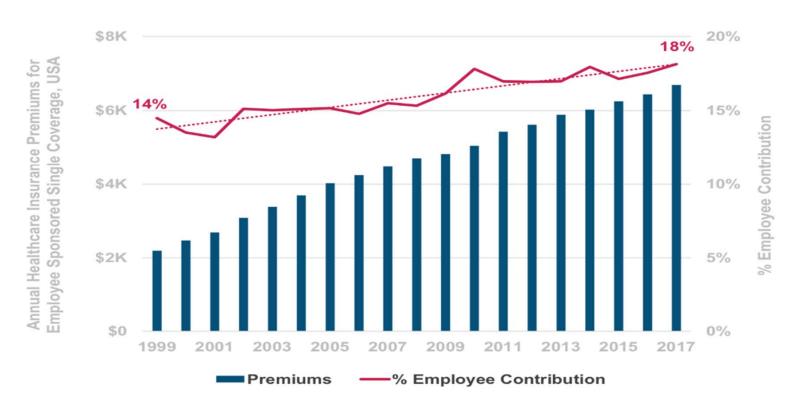
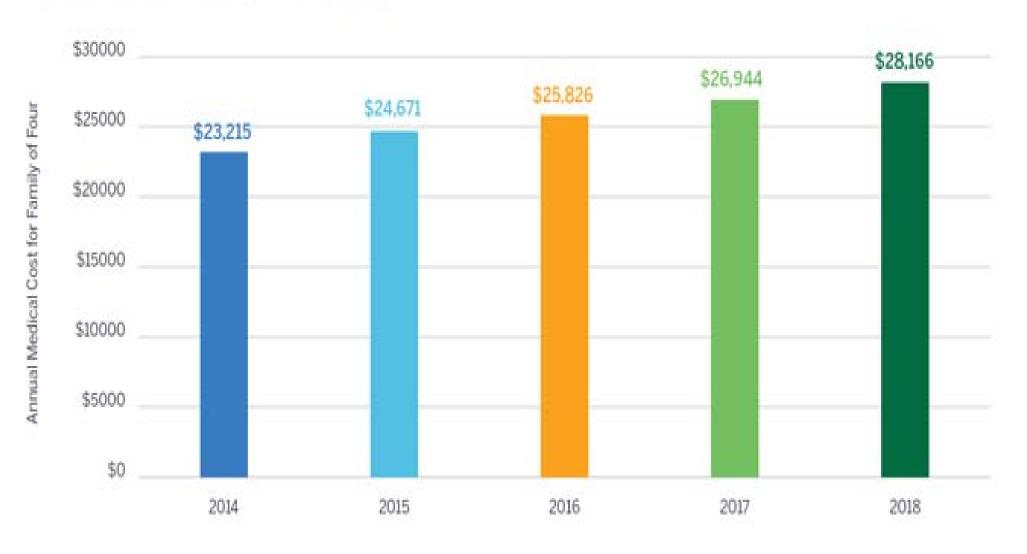
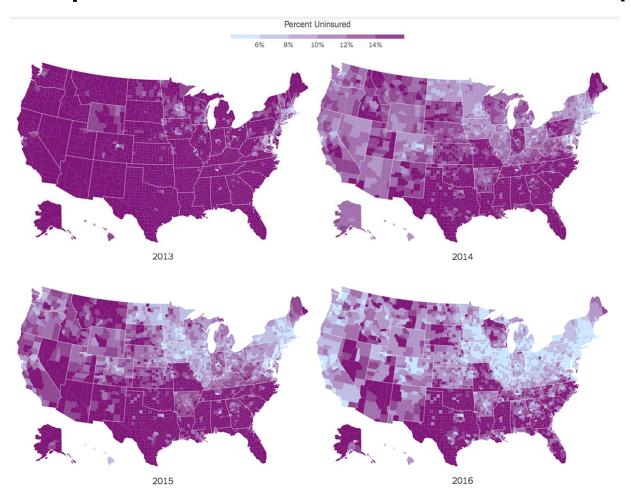


FIGURE 1: MILLIMAN MEDICAL INDEX (MMI)



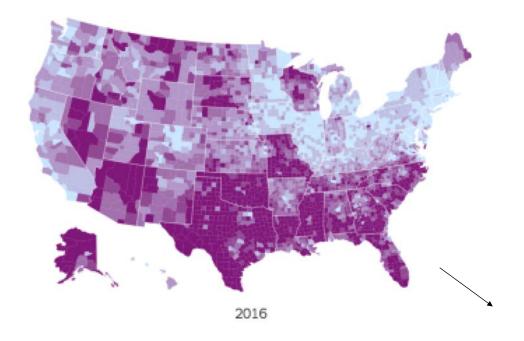
Impact of Affordable Care Act (Obamacare)

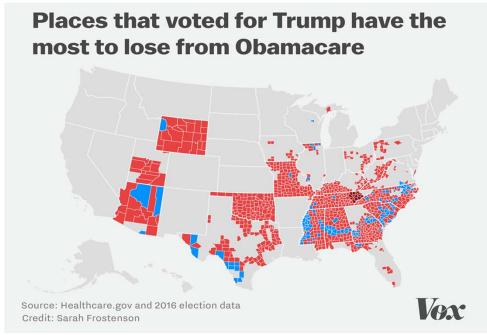


 Seven-percentage-point drop in the uninsured rate for adults nationally

HOWEVER

- Troublesome regional patterns:
 - People in South and the Southwest still don't have a reliable way to pay for health care







World's largest taxi company owns no vehicles.



World's most popular media owner creates no content



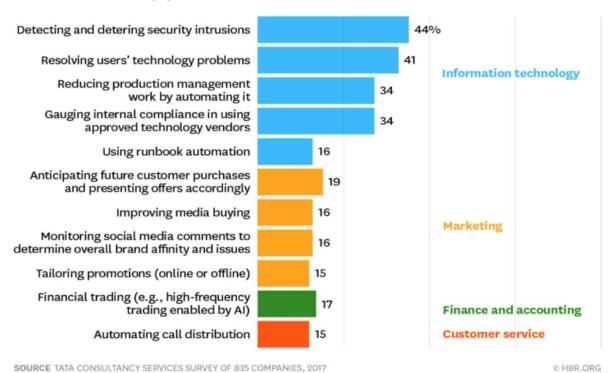
World's largest retailer has no inventory



World's largest accommodations provider owns no hotels

How Companies Around the World Are Using Artificial Intelligence

IT activities are the most popular.



Artificial Intelligence (AI) machines that can perform tasks that are characteristic of human intelligence

Machine Learning – method of achieving AI by "learning" from huge amounts of training data

Deep Learning- Subset of machine learning where there is attention paid to multiple layers of learning, modeled after how neurons work in the brain

What is patient experience?



Cross out the items that are not part of the experience of the patient

- Transportation
- •Calling the clinic
- Looking for directions
- •Finding the department once you arrive
- Finding parking
- Booking an appointment
- Emailing your doctor
- Waiting for the doctor

- Picking up your medicine
- Following directions of the doctor
- Getting blood tests done
- Social media
- Advertising
- Food
- Paying the bill



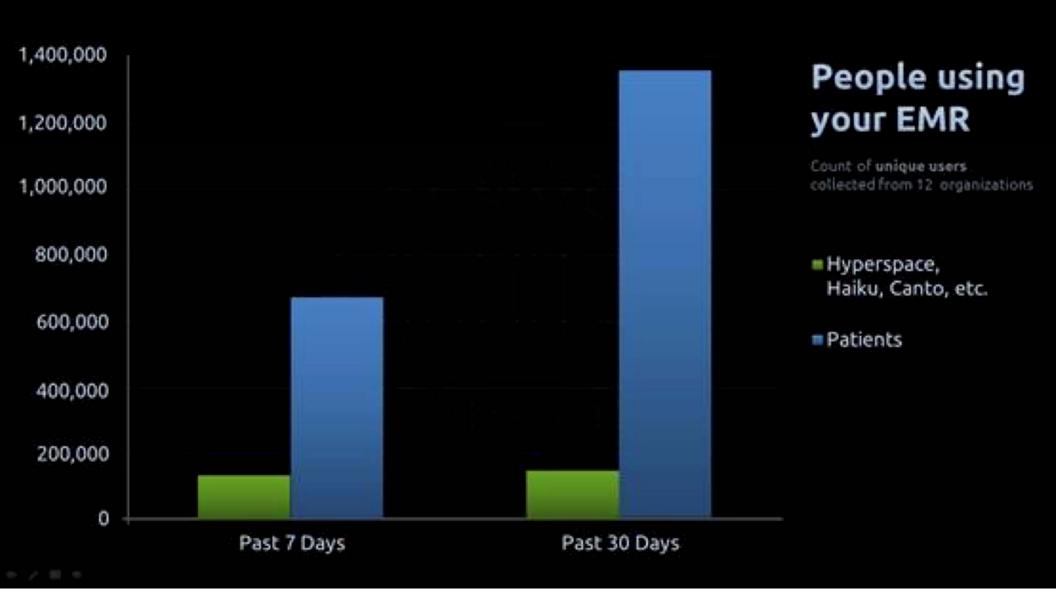




- 24 hospitals over a 700 km geography
- 12000 physicians
- 53000 employees
- 3.3 million patients / yr
- Annual revenue US\$ 12
 Billion

GOAL:

BRAND PROMISE
OF CONSISTENT
EXPERIENCE
ACROSS SUTTER



Digital Arbitrage

Arbitrage ('aːbɪtrɪdʒ,ˌaːbɪ'traːʒ)

the practice of taking advantage of a price difference between two or more markets: striking a combination of matching deals that capitalize upon the imbalance

Digital Arbitrage (Chan)

Leveraging the power and self-interest of the end user and digital solutions to accomplish the task for an even better outcome



Patient Login Jobs Newsroom

Health Education/Classes Giving **Health Blog** Find a Doctor Locations **Medical Services Special Notices PAFMG Pre-Med** Scholarship: Applications We invest in Open for 2018 community and care for ▶ Holiday Schedule those who cannot pay. Health Advisories Learn more 000 1 2 3 4 5

Patient Resources

- ▶ Medicare Benefits
- ▶ Doctor Fees
- Billing, Forms, Medical Records & Contacting Us

Search Our Calendar of Classes & Events

Upcoming Lectures

For New Patients

- ▶ Choosing a PAMF Doctor
- ▶ Quality Care at PAMF

Learn more about our:

- ▶ Electronic Health Record
- ▶ Care for All Patients
- Notice of Privacy Practices & Other Policies
- How we support local communities

Highlighted Services/Departments:

- ▶ Lasik Eye Services
- Research Institute

My Health Online

Current Users

- My Health Online Login
- Need help with your account - contact us.

New Users

- ▶ Login with Access Code
- Sign up/How to enroll
- ▶ Frequently Asked Questions





Search

MEDICARE BENEFITS

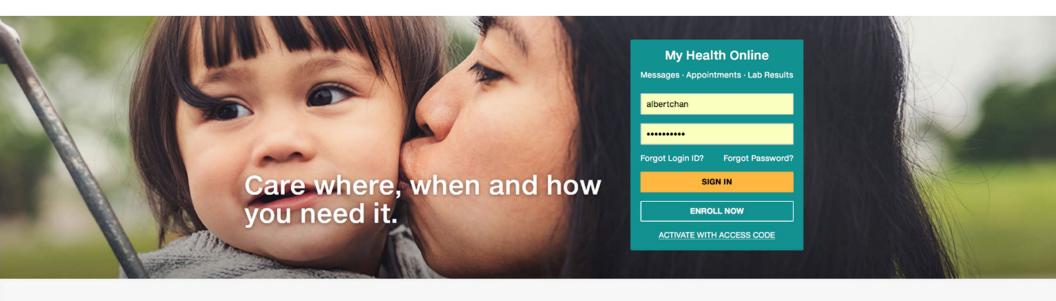
Find the right Medicare plan for you.

Urgent Care Wait Times

Contact Us

Participating Health Plans

Join the conversation:





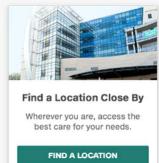
Choose the doctor who's right for you and your family.

FIND A DOCTOR



It's easy with My Health Online for Sutter patients.

SCHEDULE NOW



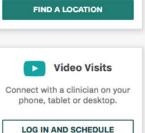


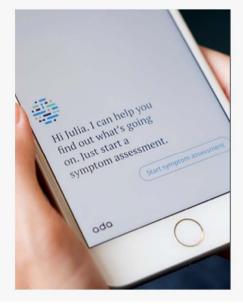
FIND WALK-IN CARE



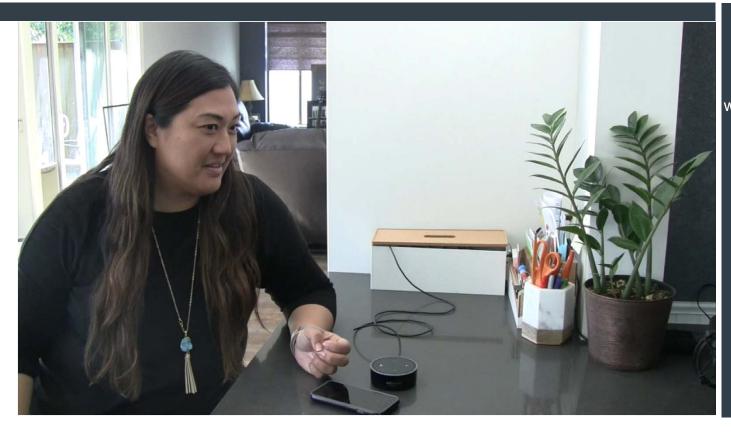
For care that's needed now, but isn't an emergency.

FIND URGENT CARE





Voice Assistant / AI Technologies



8
weeks from POC to prod

2 phases complete

2 major Al platforms



Patient-Centric Scheduling Initiative – Sutter Standards

- Portability of care delivery across Sutter Health
- Expanded schedulable same day visits
- Enable call center staff to communicate normal test results to patients, reducing multiple handoffs
- Consistent clinical escalation for Sutter Health patients during scheduling for high reliability organization
- Empower clinicians with easier ways to electronically indicate additional same day schedulable capacity, giving them additional schedule customizability



Make an Appointment

START OVER



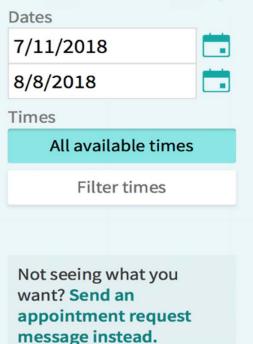








What time works for you?





Office visit for a non-urgent problem - Use this option for a non-urgent medical concern you may have or if you need to schedule a return or follow up appointment for an existing non-urgent problem.

Friday July 13, 2018

Pauline Siao, MD



8:00 AM

10:40 AM

11:40 AM

3:40 PM

4:00 PM

Tuesday July 17, 2018

Kenneth Lin, MD



7:10 AM

9:50 AM

Make an Appointment

Schedule with a provider you've seen before

Choose a provider who matches your specific needs.



Albert Chan, MD Primary Care Provider Family Medicine



Brad Alan Hinrichs, MD Otolaryngology



Kay E Drengler, DO Family Medicine



Lynn Schimmel, NP Nurse Practitioner





Steven R Lane, MD Family Medicine

Tell us why you're coming in

Choose a specific reason for scheduling an appointment.

Office Visit

OR

A general visit for non-urgent health problems. Your provider will prescribe treatment as needed.

Specialty Follow-up Visit

Follow-up appointments with your specialist for ongoing or existing conditions.

Mammography Screening

A routine screening mammogram. Please call for diagnostic mammograms or if experiencing symptoms.

Annual Physical

A preventive health exam to evaluate your overall health and order tests as needed.

OB Return Visit

An OB return visit for patients that are currently pregnant and have established care with an Obstetrician.

Same-day or Urgent Appointments: Please note same day appointments may not be available on your clinician's schedule. If your appointment is urgent in nature, please call your care center directly to handle your request appropriately.

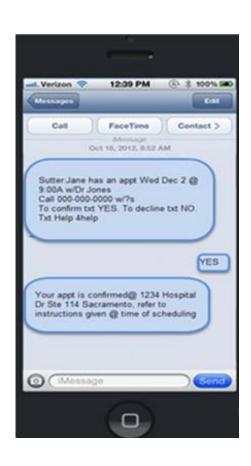
Minor Patients:

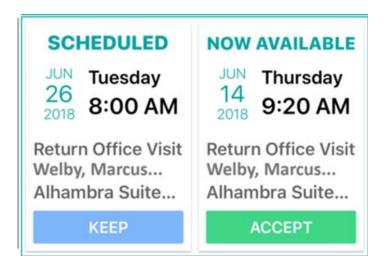
If you are under 18 years of age you may need to have your parent or guardian present at your doctor appointment, except appointments for these services:

- Contraceptive services
- Testing, treatment and prevention of STDs
- Pregnancy testing
- Abortion services
- Prenatal care
- Mental health services
- Abuse (physical, mental, emotional)
 More info

Tailored patient scheduling experience based on previous behavior

SMS Appointment Text Reminders

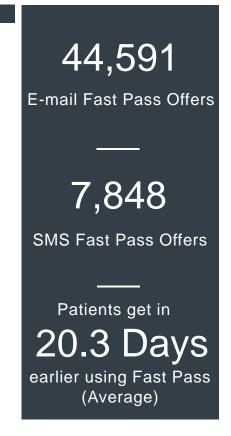




Fast Pass

Automatic Offering of Earlier Appointments Made Available by Cancellation

•Over 52,439 Fast Pass offers have been sent to patients, with SMS nearly double the success rate of Email offers (11.2% vs 7%)





If you were in charge of the washrooms at Changi Airport and needed to reduce cleaning costs, what would you do?

Would you believe a simple intervention would reduce spillage by 80% and reduce cleaning costs by 8%?





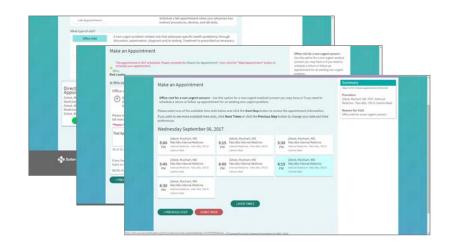
Streamlined Sutter Health's online appointing flow to ensure patients can easily complete the process



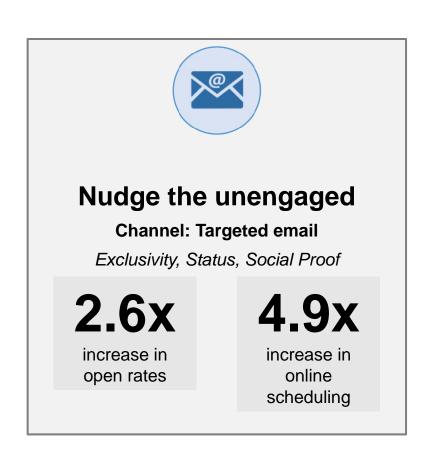
Minimize drop-off during scheduling

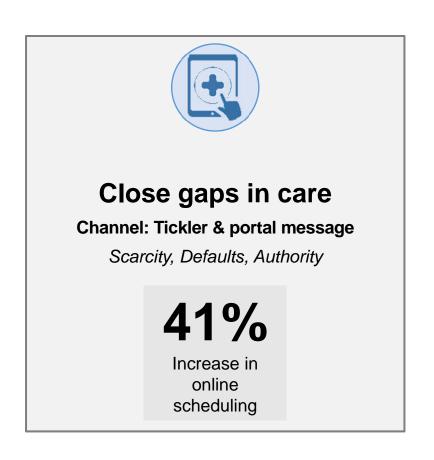
Channel: Online appointing process

- Enhanced choice architecture
- Modified defaults and number of steps
- Created quick wins
- Introduced common language



Behavioral economics solutions targeted multiple patient populations to drive portal use and schedule online







The Power of Knowing

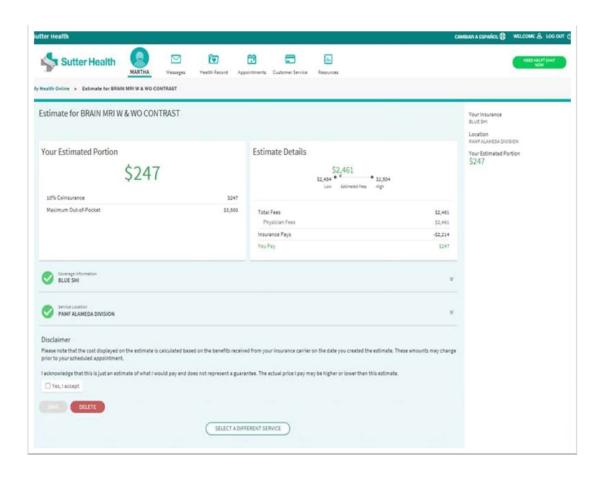
www.opennotes.org

- •70-72% of patients across the three sites reported taking better care of themselves
- •77-85% reported better understanding of their health and medical conditions
- •76-83% reported better remembering the plan for their care
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The power of simplification and integration

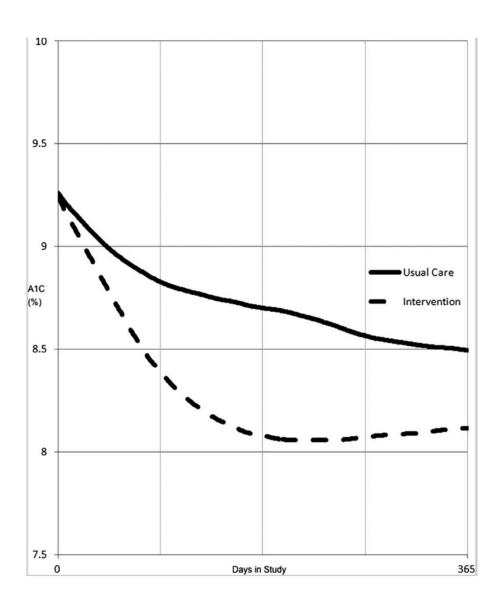






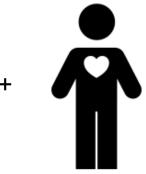
"I'd like to know what my healthcare costs will be beforehand, so I know what I can expect to pay."

~ A Sutter Patient



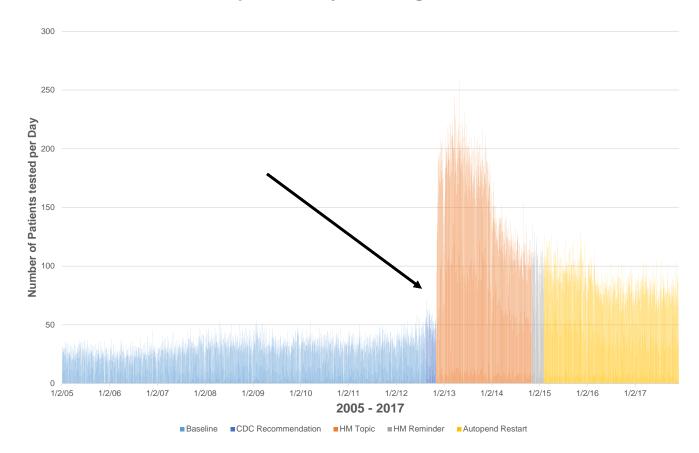
Improvement of diabetes control at 6 months





A simple alert to patients can quickly and affordably improve screening rates

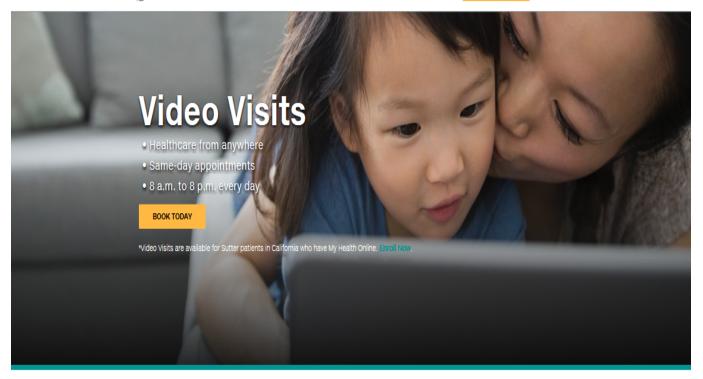
Hep C Antibody Screening Volume







BOOK TODAY



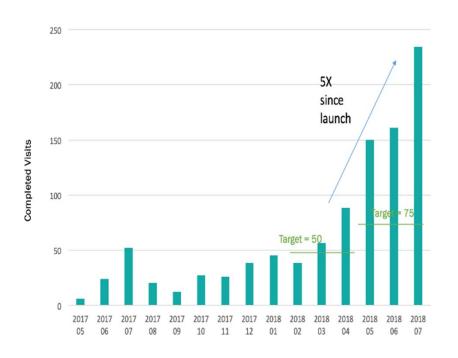






- Available to all Sutter Health patients
- 12 hours a day x 7 days a week
- Scheduled same day (virtually on demand)
- 5x volume increases since launch 28/03/2018





Same Day Video Visit Service 3/28/2018 Enterprise Launch

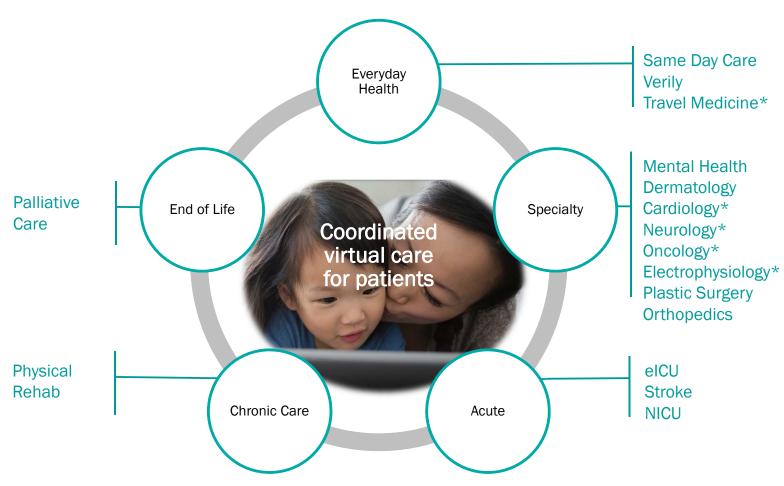


Telecardiology First patient 7/16/2018

Coordinated Virtual Care for Patients

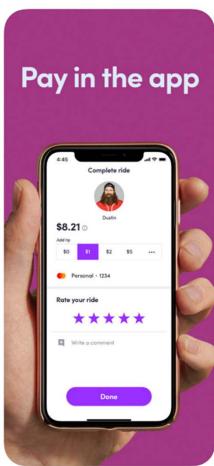


Technology enabled care across the continuum



^{*} Currently under design

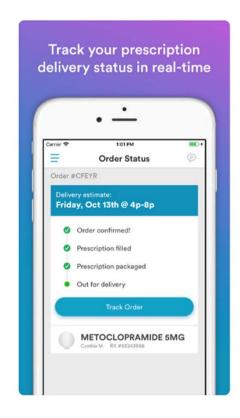




- Use case for emergency departments:
 - 25% reduction in transportation cost
 - Wait time 30 min down to 3 min

Pharmacy delivery to the home

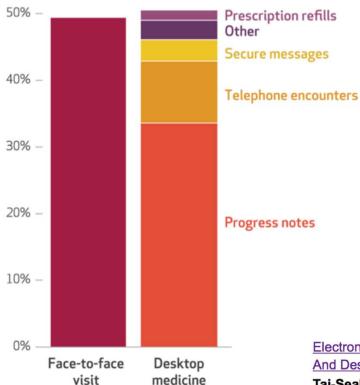




- Avoid the queue at the pharmacy
- Concierge like experience

No good deed goes unpunished

The unintended consequences of digital health adoption



For every 3.08 hours spent faceto-face in with patients

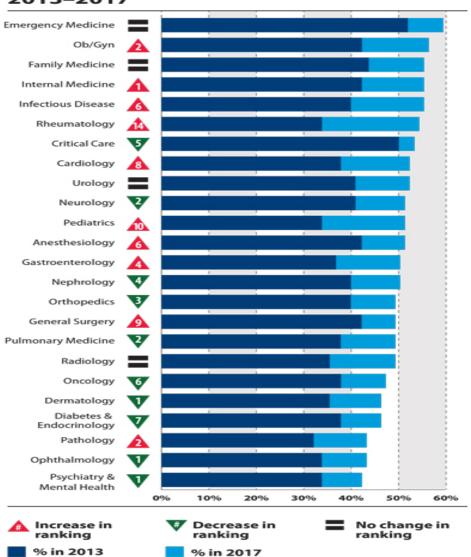
Our clinicians spend 3.17 hours on desktop medicine

<u>Electronic Health Record Logs Indicate That Physicians Split Time Evenly Between Seeing Patients And Desktop Medicine.</u>

Tai-Seale M, Olson CW, Li J, Chan AS, Morikawa C, Durbin M, Wang W, Luft HS. Health Aff (Millwood). 2017 Apr 1;36(4):655-662. doi: 10.1377/hlthaff.2016.0811.

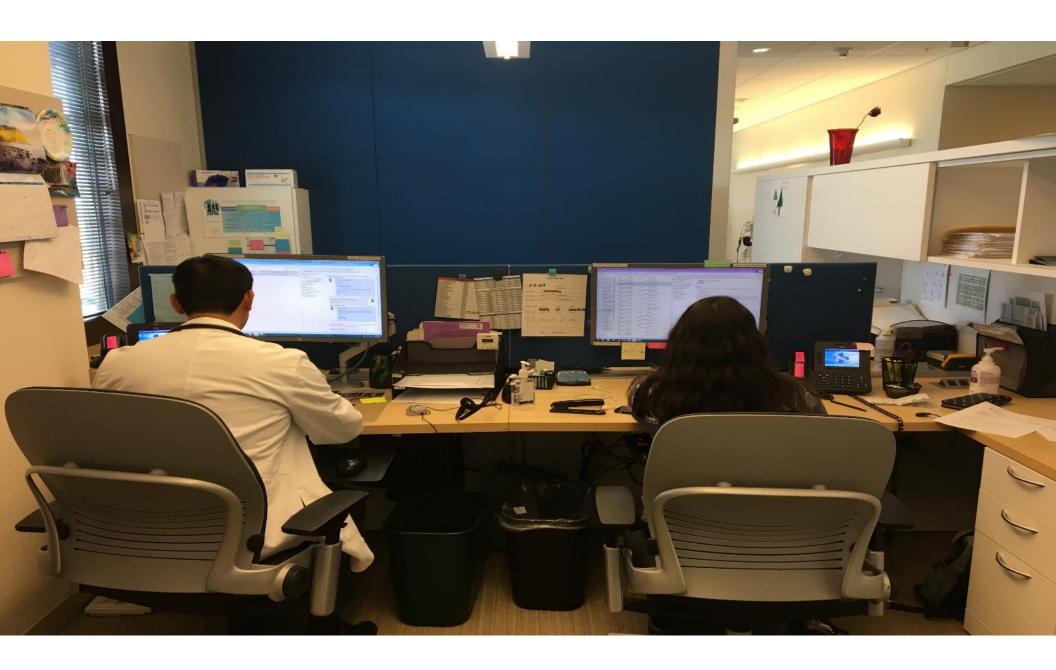
PMID: 28373331 Free PMC Article

Changes in burnout by specialty 2013–2017



Physician burnout

IT related work stated as one of the factors







AUGMEDIX

Reducing clinician burnout from chart documentation & in-basket



280,000

Office visits completed

96%
Patient acceptance

1.5 hrs

Time saved per doctor per day

104 physicians

6000

Messages cleared

Connecting clinicians to remote scribes to assist with chart documentationGould Medical Foundation, Palo Alto Medical Foundation, and Sutter Medical Foundation

Connecting clinicians with remote agents who assist with non-clinical in-basket tasks and messages

Palo Alto Medical Foundation - Internal Medicine January 2018 - Present

2014- April 2018



Detailed chart review and real time clinical decision support designed to close care gaps and improve patient outcomes



Partnering with Augmedix & Google to deploy AI tools and improve clinician and scribe workflows

\$1B suit filed against Sutter Health over data breach

By Bernie Monegain | November 23, 2011 | 10:57 AM



The theft of a computer during a break-in in October has spurred a \$1B class action lawsuit against Sutter Health, according to a report published today by the Sacramento Bee. The computer contained data on more than 4 million patients.

The suit was filed Nov. 21 in Sacramento Superior Court.

In a news release posted online by the Sacramento-based health system on Nov. 16, Sutter officials detailed the findings of its investigation into the theft and offered an apology.

"Sutter Health holds the confidentiality and trust of our patients in the highest regard, and we deeply regret that this incident has occurred," said Sutter Health President and CEO Pat Fry. "The Sutter Health Data Security Office was in the process of encrypting computers throughout our system when the theft occurred, and we have accelerated these efforts."

carequality

399 Hospitals 9,562 Clinics Across 40 States

Providers Live on Carequality



We are all leaders in digital transformation







Achieve digital literacy

Kotter's 8 Steps



Adopt a change model



Based on the books and articles by John P. Kotter © 2012 Harvard Business School Publishing



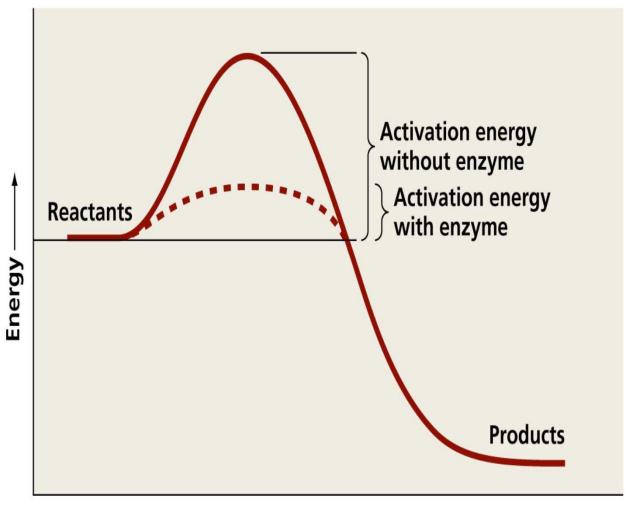


Cultivate a team of leaders



Build resiliency for change

OptionB Video



Progress of reaction -----

Questions?

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