12 Hospital Apps for Quick ROI
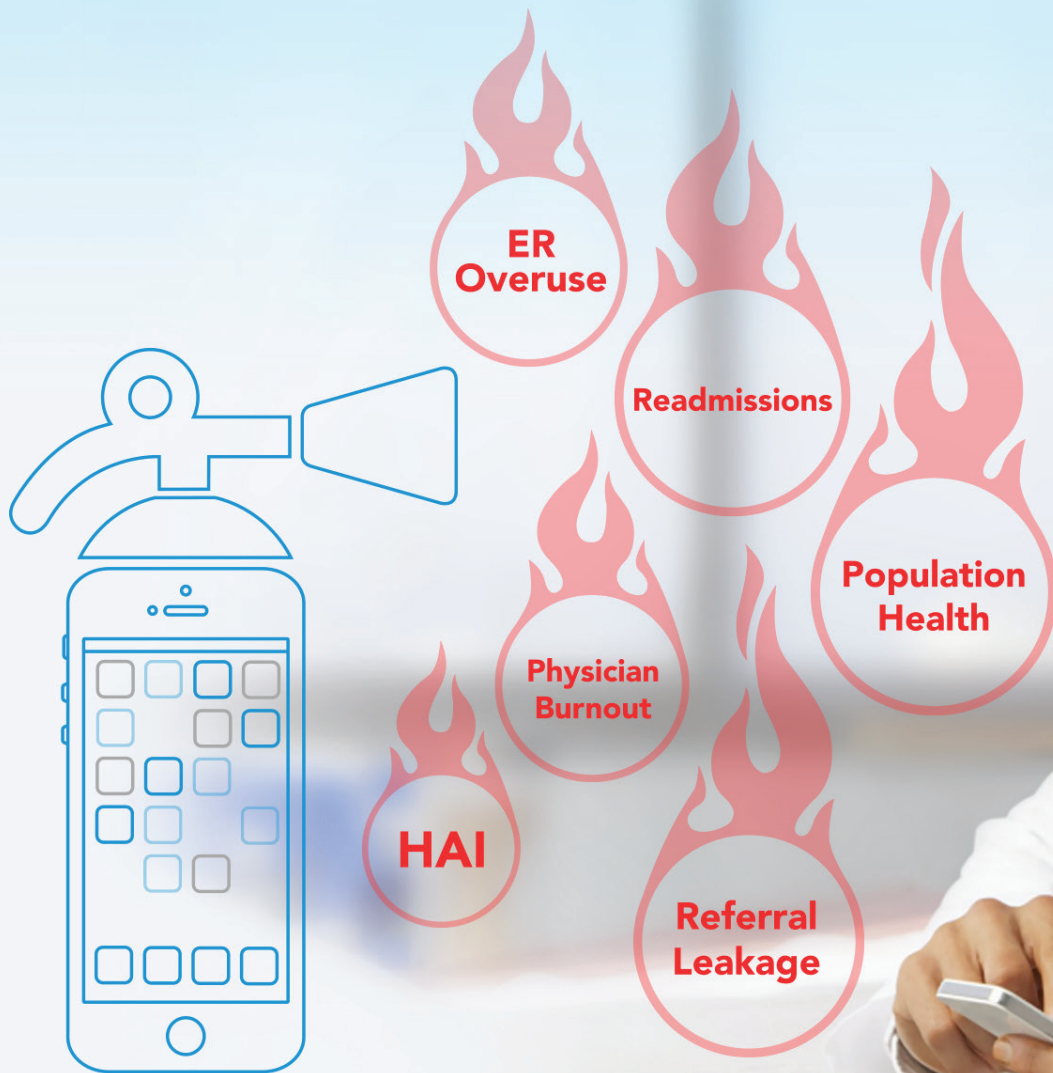
Mobile Use Cases that Will Solve Real Problems – Fast!

MobileSmith
Your Quickest Path from Idea to App

ER Overuse

Readmissions

Population Health

Physician Burnout

HAI

Referral Leakage

Mobile Health, 10 Years In: Where is the ROI?

Ever since it burst on the healthcare scene, mobile has been a novelty of great promise. Hospitals were eager to jump on the mobile bandwagon and launch a branded app or a few. Developers have been flooding the app stores with healthcare apps – as of 2015, the number of mHealth apps has reached 165,000.[1] Investment in mobile and digital health has been surging steadily. Analysts have been predicting that soon, digital health and apps would essentially replace physicians.

As years go by, however, hospital CEOs, CFOs, clinicians, and marketers increasingly question the value of their organizations' mobile initiatives. The million-dollar question now is, **where is the ROI?**

Healthcare costs are still climbing; hospital budgets are shrinking; and mobile still fails to deliver:

- There is insufficient clinical evidence to support the ROI of mobile health apps.[4]

- User adoption is less than stellar for the vast majority of provider apps.[6]

- Health apps fail to be accessible or useful to vulnerable, underserved populations.[7]

**How Can Mobile Be Put to Work Quickly?**

The New Approach: Go for Quick Wins

A 2014 McKinsey survey has found that **"starting small"** and **"acting fast"** is what patients really want when it comes to digital experiences. Highly innovative, fancy apps and wearables were found to be less important to patients than simple, straightforward mobile health tools. The advice, therefore, is to go for **"quick wins"** that, ideally, generate patient momentum and build a significant user base. [8] And, of course, show ROI – in healthcare outcomes, cost savings, revenue, etc.

At MobileSmith, we see a lot of value in such a pinprick approach to mobile strategy. Times and again, the best-performing apps turn out to be the ones that are streamlined, focused, and providing two or three simple, useful functions targeted at a particular aspect of healthcare delivery. Having worked with hospitals for 4+ years, we have been constantly on the lookout for efficient patient-facing and physician-facing mobile use cases and acutely aware of the mobile ROI problem.

So, we reached out to our clients and prospects with series of discovery questions about their most pressing needs. We have identified several areas where **mobile can be put to work quickly**. These areas range from readmission reduction to physician engagement; from ER traffic optimization to population health. We humbly submit these **12 mobile ideas** to your attention and request your feedback – are any of these problems important to you? Would you like to explore if there's an app for that - at **your** hospital, in **your** department?

Are you ready for real mobile ROI?   Read on!
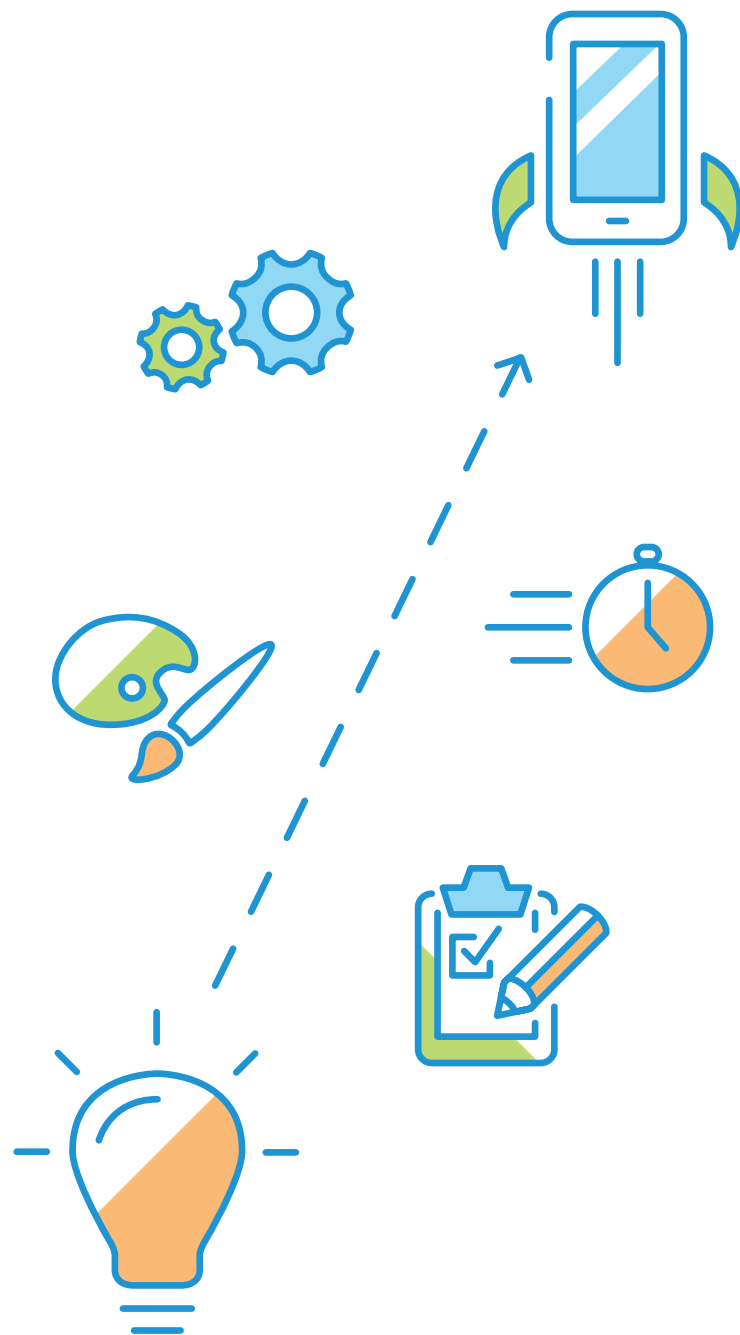
Reducing ER Overuse

Unnecessary ER visits are a major cost driver and quality issue for hospitals today. The cost of an overnight ER stay can range from $2,500 to $4000, whereas non-ER primary care alternatives can be cheaper by orders of magnitude. As ER usage grows, managing throughput can be a real challenge. At the same time, It is estimated that over 70% of ER visits are for non-urgent conditions. [10]

Key Components of the Problem:

- Non-emergency patients often present with symptoms of true emergencies. [11]
- People sometimes get redirected from urgent cares not equipped to treat them.
- Shortage of primary care doctors who accept Medicaid.
- No penalty or incentive for physicians or patients to move away from ER.
- ERs see people on the same day guaranteed; while primary care can be unpredictable.
- Newly insured people are accustomed to using the ER, despite much higher costs.

Is There an App for That?

Yes - several, in fact. Mobile functions that can divert potential ER clients focus on several problem areas:

Awareness of Alternatives:

- Show available in-network primary or urgent care providers in the area.
- Hours of operation; GPS directions and wayfinding tips; streaming wait times.
- See the friendly face of your local primary doctor; make an appointment today!

Awareness of Costs:

- Search primary providers or Urgent Care centers by accepted insurance; get directions; see wait times.
- Quick cost comparison – upfront copay vs. post-visit bill.
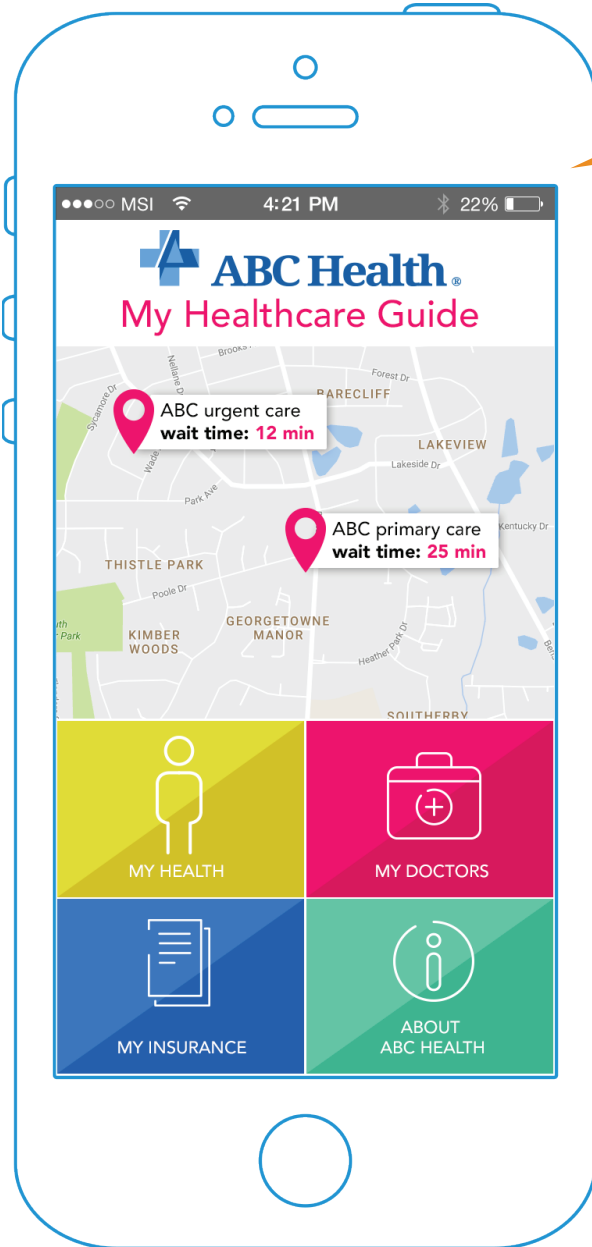
Awareness of Symptoms:

- See most common non-urgent conditions and symptoms; do I need to go to (take my child to) the ER?
- Get timely immunizations and well-checks; connect to local primary care.
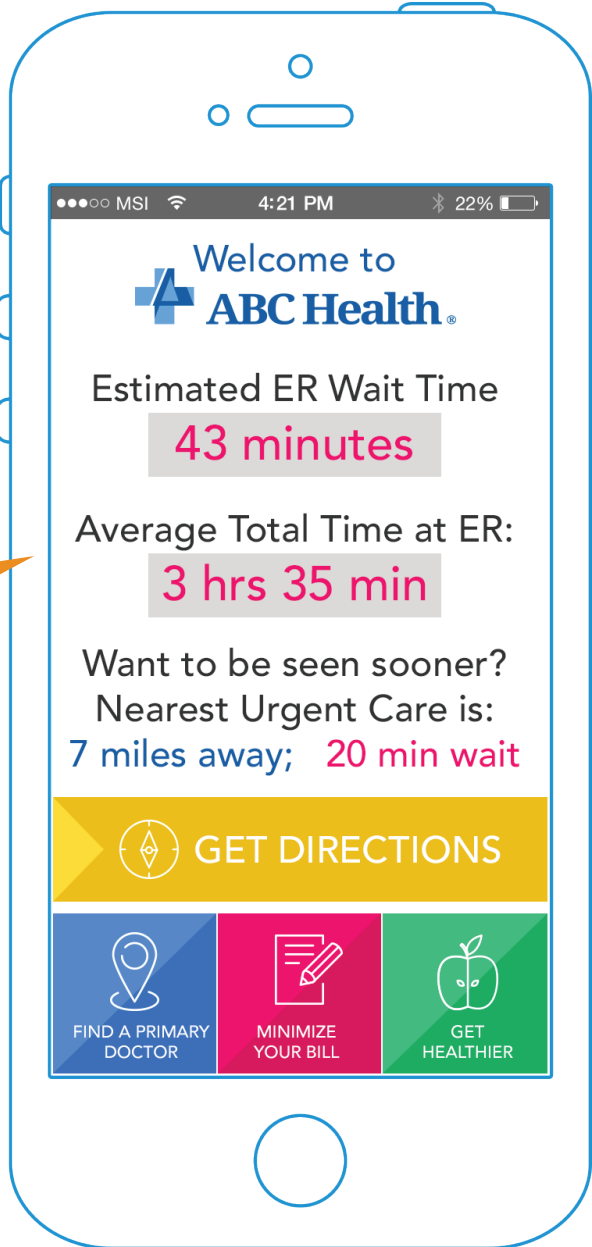
"Frequent Flyers":

- Give your super-utilizers a cheap smartphone with an app showing available overnight stay options; directions; contacts.

App Ideas for Reducing ER Overuse

1 Show your patients their primary and **urgent care options** within proximity, with dynamically populated wait times.

2 Distribute your **Wait Times** app over-the-air to all patients arriving at your ER. Show the current estimated ER wait time and the nearest alternative. Add a menu option to explore how to **minimize their bill** - copay vs. total bill, etc.

ABC Health®
My Healthcare Guide

ABC urgent care
wait time: 12 min

ABC primary care
wait time: 25 min

MY HEALTH

MY DOCTORS

MY INSURANCE

ABOUT ABC HEALTH

Welcome to
ABC Health®

Estimated ER Wait Time
43 minutes

Average Total Time at ER:
3 hrs 35 min

Want to be seen sooner?
Nearest Urgent Care is:
7 miles away; 20 min wait

GET DIRECTIONS

FIND A PRIMARY DOCTOR

MINIMIZE YOUR BILL

GET HEALTHIER

App Ideas for Reducing ER Overuse

DON'T PANIC
by **ABC Health**

What happened?

I'M INJURED

I'M NOT FEELING WELL

I HAVE A SICK CHILD

CONNECT TO A PHYSICIAN

MINIMIZE YOUR BILL

GET HEALTHIER

FIND AN URGENT CARE
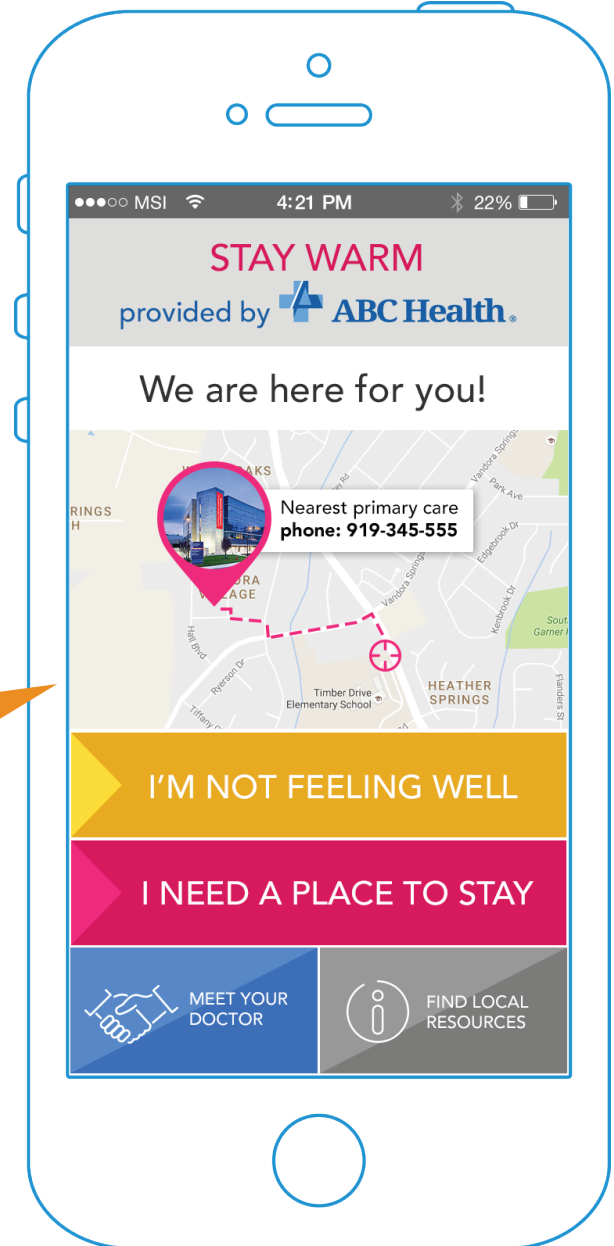
3 Distribute a branded **Emergency Symptom Checker** app to existing and prospective patients via your website, email, local search, posters and flyers, etc. Educate your patients about their care options and self-assessment for initial triage.

4 Give your **Super-Utilizers** an inexpensive device with a preinstalled app providing guidance in a tough situation. If they can connect with a friendly care provider in the neighborhood, they might avoid landing in your ER.

STAY WARM
provided by **ABC Health**

We are here for you!

Nearest primary care
phone: 919-345-555

I'M NOT FEELING WELL

I NEED A PLACE TO STAY

MEET YOUR DOCTOR

FIND LOCAL RESOURCES

Ready to launch a mobile pilot? We will work with you to develop and optimize your mobile use case for quick ROI!
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Reducing Preventable Readmissions

In fiscal 2017, 2,597 out of 3,400+ U.S. hospitals subject to the Hospital Readmissions Reduction Program will get hit by Medicare penalties. Forty-nine hospitals will be subject to the maximum 3% reduction.[13] Reducing preventable 30-day readmissions remains a pressing and multifaceted problem.

Key Components of the Problem:

- Premature discharge or inadequate post-discharge support.
- Failed handoffs; miscommunication; insufficient follow-up after discharge. [14]
- Complications following procedures.
- Hospital-acquired infections and conditions.
- Medication non-adherence and adverse drug events. [15]
- Loss of independence after surgery for older patients. [16]
- Conditions: CHF, diabetes, sepsis, COPD, total hip and knee replacement, pneumonia. [13]

Is There an App for That?

Yes – there are several quick apps you can implement to target these problems and see rapid ROI:

Pre-op / Post-op Apps:

- Targeted, precise pre-op and post-op instructions for any type of surgery or procedure.
- Accurate list of medications and customizable reminders for the patient and their caregiver(s).

Mobile Discharge Summary:

- Turn the Discharge Summary into an app; make it portable to reduce miscommunication between providers.

Mobile Handout to Patients:

- Mobile self-survey similar to "Ask Me 3" formulated by the National Patient Safety Foundation. [17]
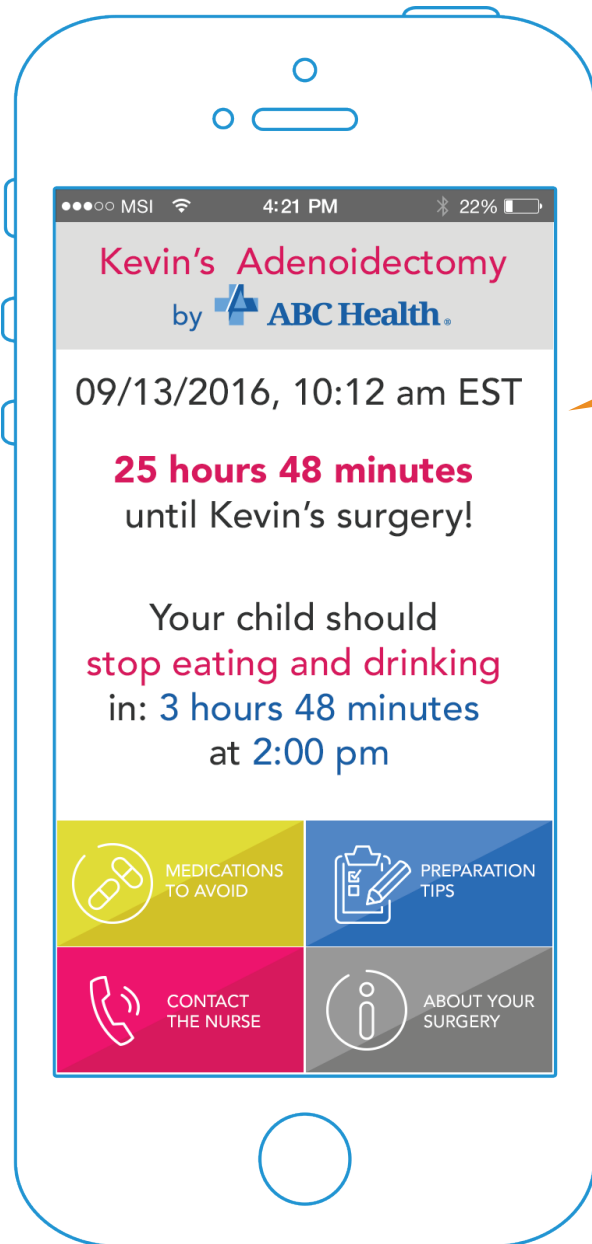
Home Care App:

- List of patients to visit; GPS directions; secure check-in; enter/edit notes; use beacons to track home visits.
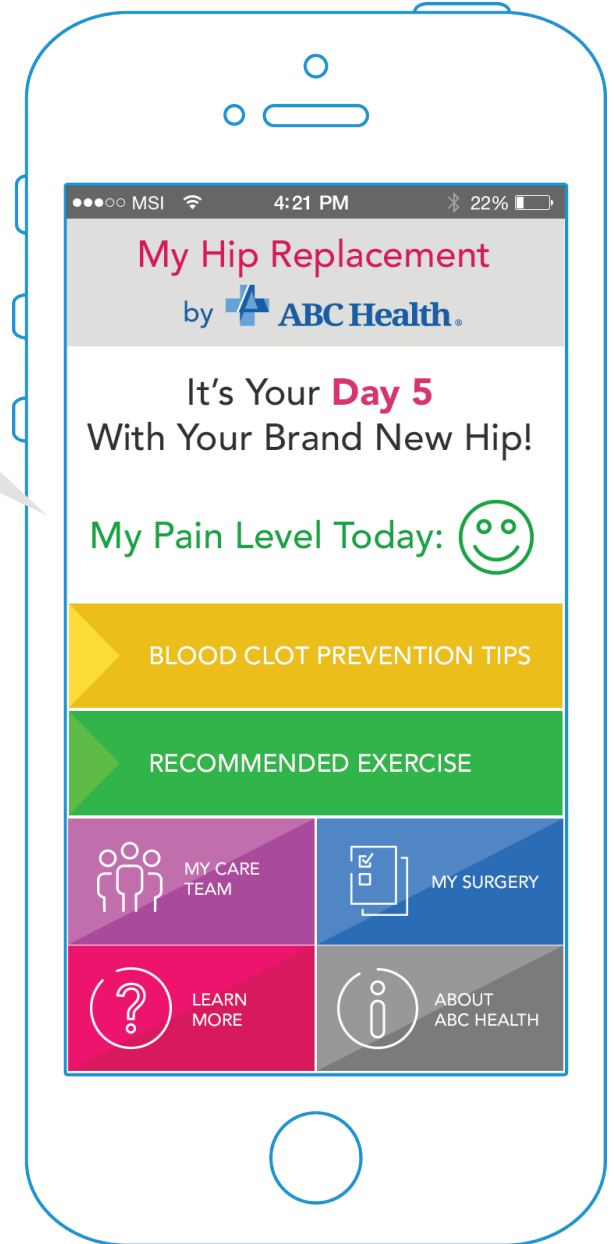
Antimicrobial Stewardship App

- Education for physicians; hospital policies; local antimicrobial resistance stats; prescription guidelines.
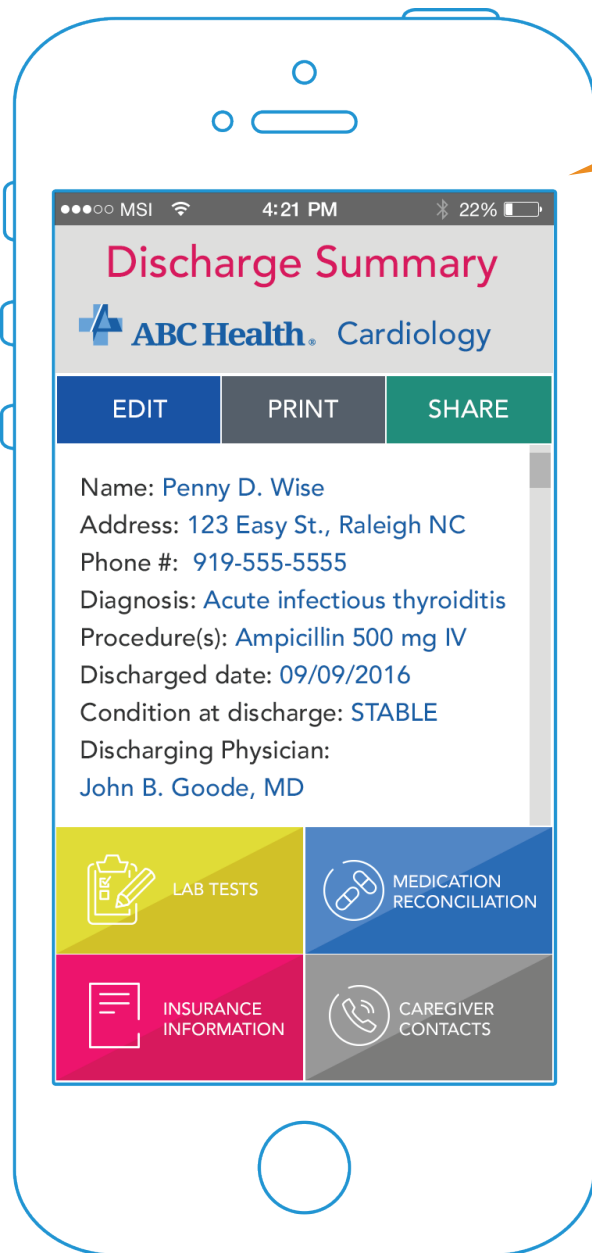
Condition-Specific Wellness Apps

App Ideas for Reducing Preventable Readmissions

Kevin's Adenoidectomy
by ABC Health

09/13/2016, 10:12 am EST

25 hours 48 minutes
until Kevin's surgery!

Your child should
stop eating and drinking
in: 3 hours 48 minutes
at 2:00 pm

MEDICATIONS TO AVOID

PREPARATION TIPS

CONTACT THE NURSE

ABOUT YOUR SURGERY

5 Give your surgery patient a targeted **Pre-Op/Post-Op** app with customized, date-specific instructions and auto-reminders. No EHR sync necessary! Physicians can easily input patient info at the time of the appointment.

My Hip Replacement
by ABC Health

It's Your **Day 5**
With Your Brand New Hip!

My Pain Level Today:

BLOOD CLOT PREVENTION TIPS

RECOMMENDED EXERCISE

MY CARE TEAM

MY SURGERY

LEARN MORE

ABOUT ABC HEALTH

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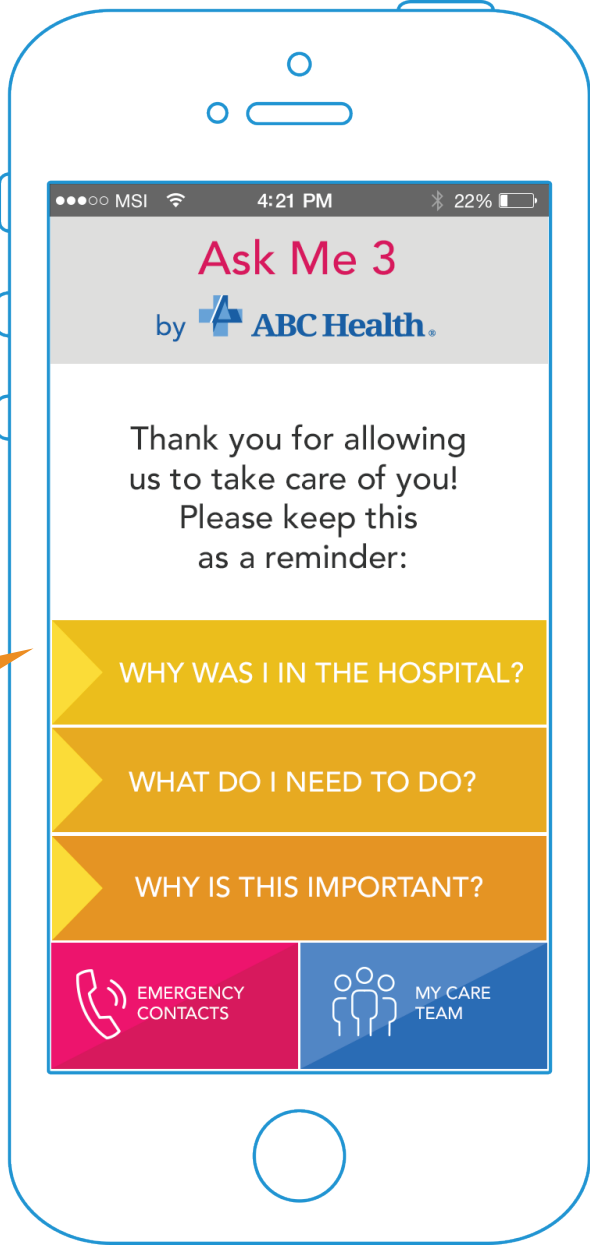Contact MobileSmith: 855.516.2413   pilot@mobilesmith.com
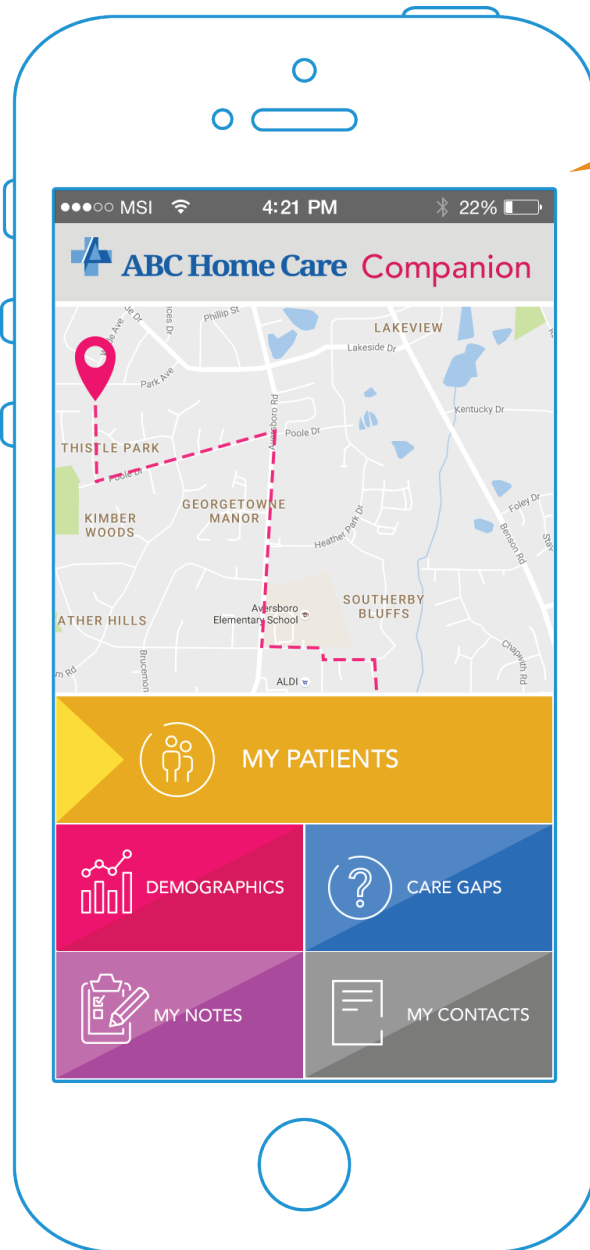
8

App Ideas for Reducing Preventable Readmissions

6 Mobilize your Discharge Summary – simplify and accelerate data entry for the discharging physician; give the completed mobile Summary to the patient or their caregiver; or transmit it securely to their continued care provider.

7 What percentage of your patients can correctly remember their diagnosis at discharge and their doctor's recommendations? Don't take chances - give them a mobile handout, so they can access all the key information any time, anywhere.

Discharge Summary

●●●○○ MSI 4:21 PM 22%

Discharge Summary
ABC Health Cardiology

EDIT	PRINT	SHARE

Name: Penny D. Wise
Address: 123 Easy St., Raleigh NC
Phone #: 919-555-5555
Diagnosis: Acute infectious thyroiditis
Procedure(s): Ampicillin 500 mg IV
Discharged date: 09/09/2016
Condition at discharge: STABLE
Discharging Physician:
John B. Goode, MD

LAB TESTS | MEDICATION RECONCILIATION
INSURANCE INFORMATION | CAREGIVER CONTACTS

Ask Me 3

●●●○○ MSI 4:21 PM 22%

Ask Me 3
by **ABC Health**

Thank you for allowing us to take care of you! Please keep this as a reminder:

WHY WAS I IN THE HOSPITAL?

WHAT DO I NEED TO DO?

WHY IS THIS IMPORTANT?

EMERGENCY CONTACTS | MY CARE TEAM

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App Ideas for Reducing Preventable Readmissions

ABC Home Care Companion

MY PATIENTS
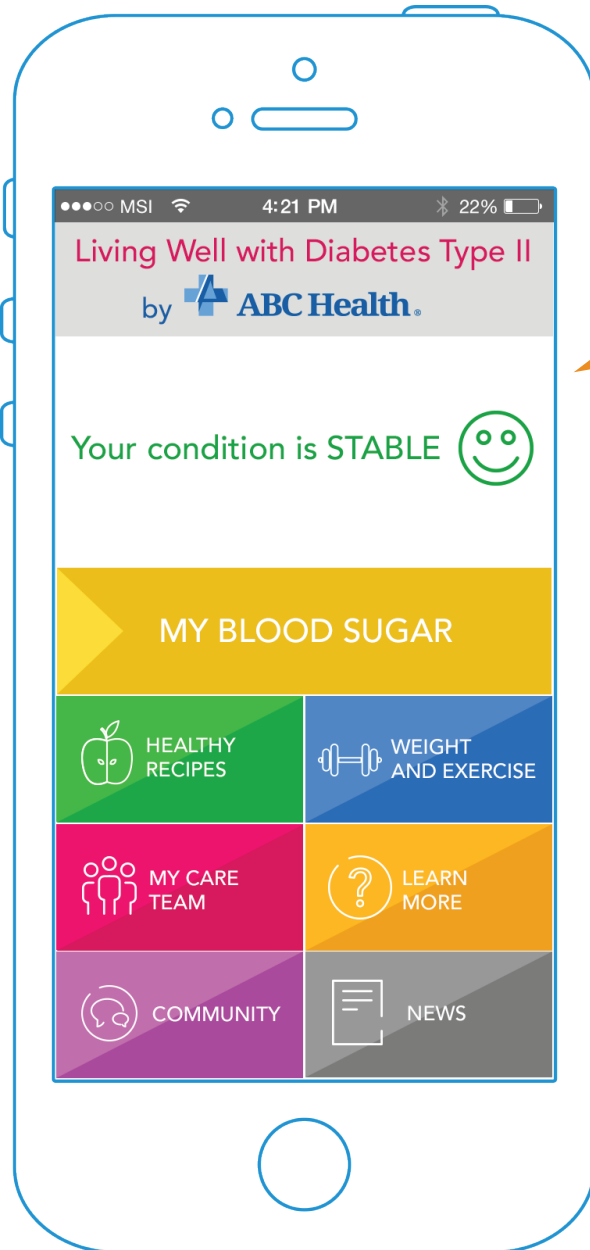
DEMOGRAPHICS

CARE GAPS

MY NOTES

MY CONTACTS

8 If you have a home visit program, your care coordinators will need an easy-to-use **Home Care Companion** app to schedule visits, enter or edit notes, and identify care gaps. Your team can login securely and quickly sync data with internal data sources.

Complement your **Antimicrobial Stewardship** program by an easy-to-update mobile app featuring facility-specific treatment recommendations, local susceptibilities, updates on antibiotic prescribing, resistance, and infectious disease management. **9**
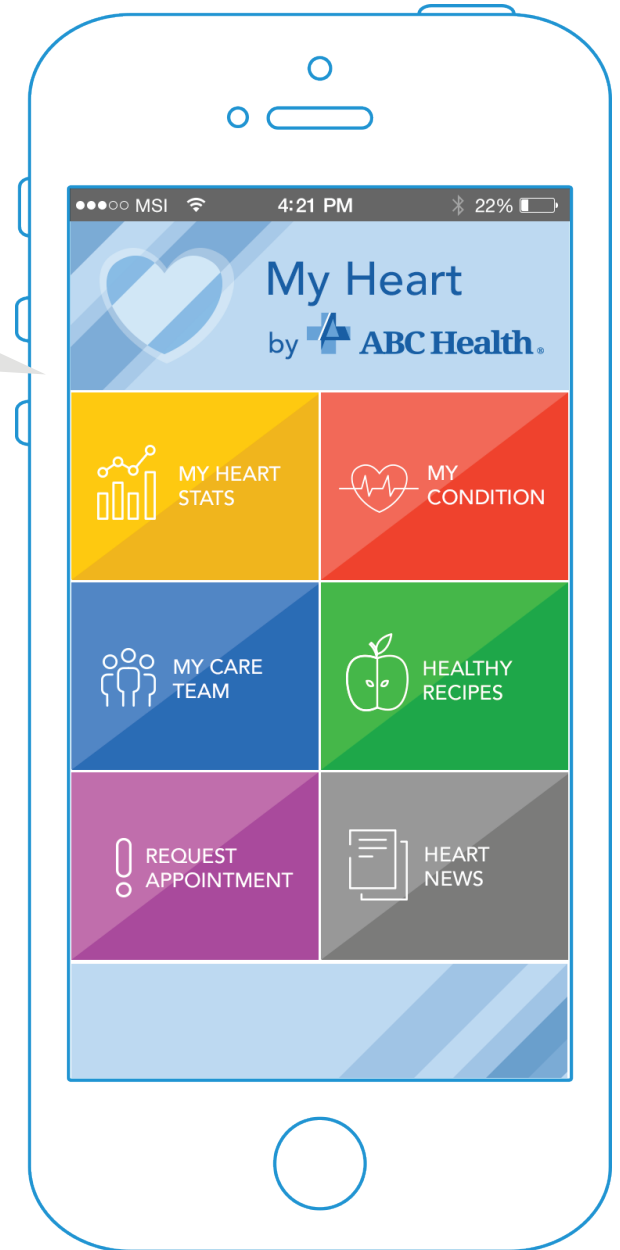
Prescribe Responsibly
ABC Health

ANTIBIOTIC RESISTANCE

SEARCH BY CONDITION

SEARCH BY MEDICATION

PROGRAM CONTACTS

UPCOMING TRAININGS

NEWS AND RESEARCH

App Ideas for Reducing Preventable Readmissions

10 Launch **Condition-Specific Apps: CHF, Diabetes, COPD, Pregnancy** etc. to provide targeted education for specific patient groups. Point users to local resources; help them track their condition and medications; encourage them to lead a healthy lifestyle. Launch multilingual apps for broader reach!

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Engaging Physicians

Physician shortage; burnout, and disengagement are increasingly impacting the accessibility and quality of healthcare services. Continued referrals outside of networks cause a steady leakage of patients that results in nearly 40 million in lost revenue per year.[19] When your hospitals leaks referrals, it also forfeits the oversight of patient care and loses the leverage over information exchange, which can disrupt the continuity of care. So, there is a larger cost to the problem than just the loss of revenue. Among the physicians employed at hospitals, burnout is hitting critical levels. Last year, burnout levels reached 55%, according to a MedScape survey. [21] Retaining and engaging physicians is one of the top priorities for hospitals today, and the focus of many programs.

Key Components of the Problem:

- Out-of-network referrals lead to loss of revenue and loss of control over information exchange.
- Too much paperwork is cited as the top contributing factor to physician burnout. [22]
- Poor communication between physicians and administrators leads to disengagement.
- EHR implementations may be plagued by order errors and compromised patient data security, adding to physicians' job stress. [23]

Is There an App for That?

Physician-facing mobile apps can go a long way towards solving these problems. You can distribute these apps to your staff via email and update content on-the-fly.
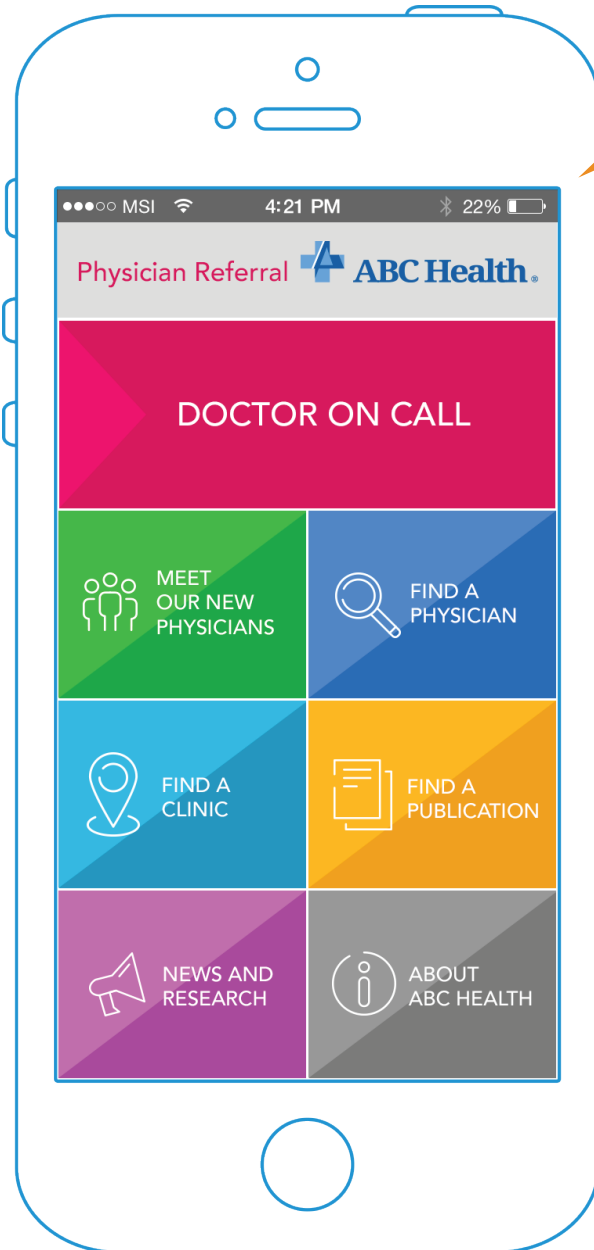
Streamline Physician Referral:

- Reduce physician leakage– promote your brand and facilitate referrals within network using a public-facing physician referral app.

Improve Physician Engagement:

- Foster high morale and alleviate burnout by improving internal communications using a customized internal app.
- Add a dynamic directory, search, and interactive location-based features.
- Use your internal app to organize and promote trainings, events, contests etc.

Are you a Physician or a Nurse facing everyday challenges? Got a great idea for a mobile app? Reach out to us, and let's build it!

pilot@mobilesmith.com

App Ideas for Preventing Referral Leakage and Physician Burnout

11 Launch a branded **Physician Referral app** to streamline your referral process and foster physician relationships. Make it easy for in- and out-of-network physicians to refer to your healthcare system. Promote your healthcare brand to the local physician community.

Foster physician engagement and morale with **targeted internal apps**. Promote patient care values; include educational resources; feature a quote of the day or an employee of the week; promote internal success stories and run contests (use beacons to introduce location-based features!) **12**

Physician Referral **ABC Health**®

DOCTOR ON CALL

MEET OUR NEW PHYSICIANS

FIND A PHYSICIAN

FIND A CLINIC

FIND A PUBLICATION

NEWS AND RESEARCH

ABOUT ABC HEALTH

ABC Health®
Excellence in Patient Care

Employee of the Week:

Martin Jones, Orthopedic RN
"He who cures a disease may be the most skillful, but he who prevents it is the safest doctor."

OUR VALUES

ADMINISTRATION BY DEPARTMENT

UPCOMING TRAININGS

NEWS AND RESEARCH

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13

MobileSmith is the #1 platform for branded hospital apps in the U.S. We invite you to launch a **mobile pilot** at your healthcare facility!

Your feedback on the mobile ideas presented here is greatly appreciated.
Are these problems important to your organization?
Are you ready to put mobile apps to work?

We will work with you diligently to get to the root of the problem and come up with the optimal mobile solution.

Contact us Today:
✉ **pilot@mobilesmith.com**

References

Mobile Health ROI

1. IMS Health Study: Patient Options Expand as Mobile Healthcare Apps Address Wellness and Chronic Disease Treatment Needs. September, 2015

2. In 2016, Users Will Trust Health Apps More than Their Doctors. *Forbes*, December 2015

3. The importance of assessing critical IT system investments. *Beckers's Health IT and CIO Review*, July 27, 2016

4. Easy on those apps: Mobile medical apps gain support, but many lack clinical evidence. *Modern Healthcare*, November 28, 2015

5. American Medical Association CEO pans "ineffective" EHRs, D2C digital health, and apps of "mixed quality". *MobiHealthNews*, June 13, 2016

6. Losing Patience: Why Healthcare Providers Need to Up Their Mobile Game, *Accenture*, 2015

7. Popular Mobile Apps Fail to Serve Vulnerable Populations. *UCSF*, July 14, 2016

8. Healthcare's Digital Future. *McKinsey & Company,* July 2014

ER Overuse

9. Contrary to goals, ER visits rise under Obamacare. *USA Today,* May 4, 2015

10. Truven Health Analytics Study Finds Most Emergency Room Visits Made by Privately-Insured Patients Are Avoidable. *Truven Health,* April 25, 2013

11. Insurance Company Report on New York Emergency Visits Is Based on Inaccurate Assumptions and Flawed Analysis, Puts Patients at Risk. *ACEP*, April 11, 2016

12. A Hospital Offers Frequent ER Patients An Out — Free Housing. *NPR*, June 29, 2016

Readmissions

13. CMS penalizes 2.6k hospitals for high readmissions: 5 statistics. *Modern Healthcare,* August 04, 2016

14. Healthcare miscommunications contribute to a quarter of readmissions. *Fierce Healthcare,* March 17, 2016

15. What instructions? Majority of Americans misuse prescription drugs. *STAT,* July 29, 2016

16. Loss of independence after surgery for older patients associated with increased risk of hospital readmission. *Science Daily quoting a JAMA study,* July 13, 2016

17. Ask Me 3: Good Questions for Your Good Health. *National Patient Safety Foundation.*

18. Core Elements of Hospital Antibiotic Stewardship Programs. *Centers for Disease Control and Prevention.* Updated May 25, 2016

Physician Engagement

19. Stop the (Revenue) Leakage. *Parley*, June 18, 2015

20. Referral networks, stopping leakage and technology investments: 5 top revenue generation strategies for CFOs. *Becker's Hospital CFO,* May 19, 2015

21. Physician Burnout Climbs 10% in 3 Years, Hits 55%. *MedScape,* December 1, 2015

22. Medscape Lifestyle Report 2016: Bias and Burnout. *MedScape,* January 13, 2016

23. Island Health to review Cerner implementation that pushed physicians to revert to paper records. *Becker's Health IT and CIO Review,* July 22, 2016.