

# **Mobilizing the Academic Medical Library**

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***LM Stowe Library***

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<http://library.uchc.edu>

# Where Do You Stand?

**My library provides mobile resources.**

# Where Do You Stand?

**I feel comfortable teaching about mobile devices and resources.**

# Where Do You Stand?

Do you have an established relationship with IT to help support mobile resources?

# Our experience at UCONN Health - *TIMELINE*



**Champion Program  
Faculty & Students**

**Classes  
User Groups  
Web Page**

**DBs  
Added  
(F, L)**

**Mandatory  
laptop for  
incoming  
students**

**More mobile  
content (V); iPad  
to librarians;  
replacing laptops?**

**PDA  
student  
mandate**

**PDA  
mandate  
updated**

**iTouch to  
teaching  
librarians**

**PDA's to  
eager  
librarians**



2001

2002

2003

2004

2005

2006

2007

2009

2010-2013

...

# Our Strengths

- **Library reports to CIO**
  - Good relations with IT
  - **Service** oriented academic computing support
  - Proven track record with faculty, staff, students
  - Library staff willing to accept new challenges
- **Library collaboration - faculty and students**
  - Champion program
  - Mandated smartphones for 3<sup>rd</sup> year Med Students

# Our Challenges

- **Financial issues**
- **Getting time to work with students**
- **Not easy to be bridge between IT and users**
  - Different culture and language
- **Security issues**
  - Encrypting student laptops
  - Recognizing danger of mobile devices

# Why encryption?

SC Magazine > Blogs > The Data Breach Blog > Stolen laptop compromises patients of California medical group



Adam Greenberg, Reporter

Follow @writingadam

August 07, 2013

## Stolen laptop compromises patients of California medical group

The California-based Retinal Consultants Medical Group website says it offers patients "uncompromising care," but a **compromise of data** is exactly what patients got after a laptop containing sensitive client information was stolen.

**How many victims?** Unknown.

**What type of personal information?** Name, date of birth, gender, race and optical coherence tomography images – all unsecured.

**What happened?** An investigation is ongoing, but the laptop was stolen after the office was closed.

**What was the response?** The theft was reported to the local police department. A letter dated July 31 was mailed to affected patients alerting them of the breach. The company is increasing the physical security of imaging and other equipment stored at its offices, increasing the interior and exterior security of its offices, and requiring additional information when confirming a patient's identity on the phone. Additional (though undisclosed) steps are being taken to secure laptop data.

**Details:** Employees discovered on June 7 that the laptop, a component of a diagnostic imaging machine, was stolen sometime after the offices closed on June 5. An investigation is ongoing.

**Quote:** "As a result of our investigation we are not aware of any unauthorized use of the PHI protected

The screenshot shows the HICPro website interface. At the top, there are navigation links for PRODUCTS, ABOUT US, and CONTACT US. Below that, a breadcrumb trail reads: Home > Health Information Management Main Page > e-Newsletters > HIM-HIPAA Insider. The main heading is "Health Information Management". There are social sharing options for E-mail, Print, RSS, and ShareThis. The article title "Hartford hospital: Unencrypted stolen laptop included PHI of 9,500 patients" is prominently displayed and circled in red. Below the title, it says "HIM-HIPAA Insider, August 6, 2012". A sidebar on the left contains sections for "Articles by Publication" (Free e-Newsletters, Newsletters) and "Articles by Topic" (APCs, Clinical Documentation Improvement, ICD-9-CM Coding, CPT Coding, Electronic Health Records, HIPAA, Joint Commission, MS-DRGs, Recovery Audit Contractors). A subscription box asks "Want to receive articles like this one in your inbox?" with a link to "Subscribe to HIM-HIPAA Insider!". The main article text begins with "A third-party subcontractor handling health records of a hospital and home health provider is responsible for a breach involving a stolen unencrypted laptop computer that included PHI of more than 9,500 patients, according to the hospital." It continues with "Hartford Hospital and VNA HealthCare of Connecticut reported on the hospital's website that they discovered June 26 the laptop stolen from a subcontractor employee's home." and "An employee at Greenplum, a subsidiary of one of the hospital's vendors, EMC Corp., had been performing data analysis for EMC as part of a quality improvement project related to hospital readmissions." The article concludes with "The data on the Greenplum employee's unencrypted laptop contained information on 7,461 VNA HealthCare patients and 2,097 Hartford Hospital patients." and a link to "Click here to read more on the HIPAA Update blog."



# Mobile Iron



## SOLUTIONS

MOBILEIRON PLATFORM AND SOLUTIONS OVERVIEW

MOBILE FIRST

MOBILE DEVICE MANAGEMENT ▶

MOBILE APPLICATION MANAGEMENT ▶

MOBILE CONTENT MANAGEMENT ▶

BYOD ▶

BES REPLACEMENT

MOBILE SECURITY ▼

Secure Email and DLP

ANDROID FOR BUSINESS

## Mobile Security: The MobileIron Layered Security Model

### Mobile Security

The goal of a [Mobile First IT organization](#) is to serve the needs of the business by establishing the best mobile user experience for the employee. **Mobile security** should be invisible to the user while still protecting corporate data.

MobileIron's Layered Security Model protects corporate data without compromising the user experience. It provides the basis for a partnership between IT and employees based on productivity, not restriction, without putting enterprise data at risk.

### Layered Security for the Enterprise Persona



NATIVE USER EXPERIENCE

### Layered Security for the Enterprise Persona

An enterprise persona is the collection of enterprise data ([email](#), apps, documents, web content) and settings (certificates, policies, configurations) on an employee's mobile device.

# What about smartphone security?

- BYOD (Bring your own device) policy
- New UCONN Health policy in 2012
- Mandates that all smartphones need to have security software installed in order to use UCONN Health email

# What are our Outcomes

- Meaningful curriculum impact
- Powerful collaboration and Faculty buy-in
- Helping solve institutional problems
- More opportunities

# What are other institutions doing?

- *Mobile services for broke libraries: 10 steps to mobile success*
  - Houghton, Sarah: *The Reference Librarian* 53:313-321, 2012
- *Rethinking our mobility: supporting our patrons where they live*
  - Gomes A & Abate L: *MRSQ* 31(2): 140-149, 2012

# What are other institutions doing?

- *The mobile medical library – is there an app for that?*
  - Schnell, Eric: *Journal of Electronic Resources in Medical Libraries*, 9(2): 147-154, 2012
- *Yale Medical School iPad Program*
  - <http://clc.yale.edu/2012/04/03/yale-medical-school-ipad-program/>

# What can YOU do?

- Your administrative challenges & strengths
- Your technical challenges & strengths
- Your financial challenges & strengths

# What to do Next?

SlideShark

go.nmc.org

iBookAuthor

3Dprinting

Upad

Dropbox

Evernote

WearableTechnology

NewMediaConsortium

Cheddar

BYOD

TagMyDoc

DrawMD

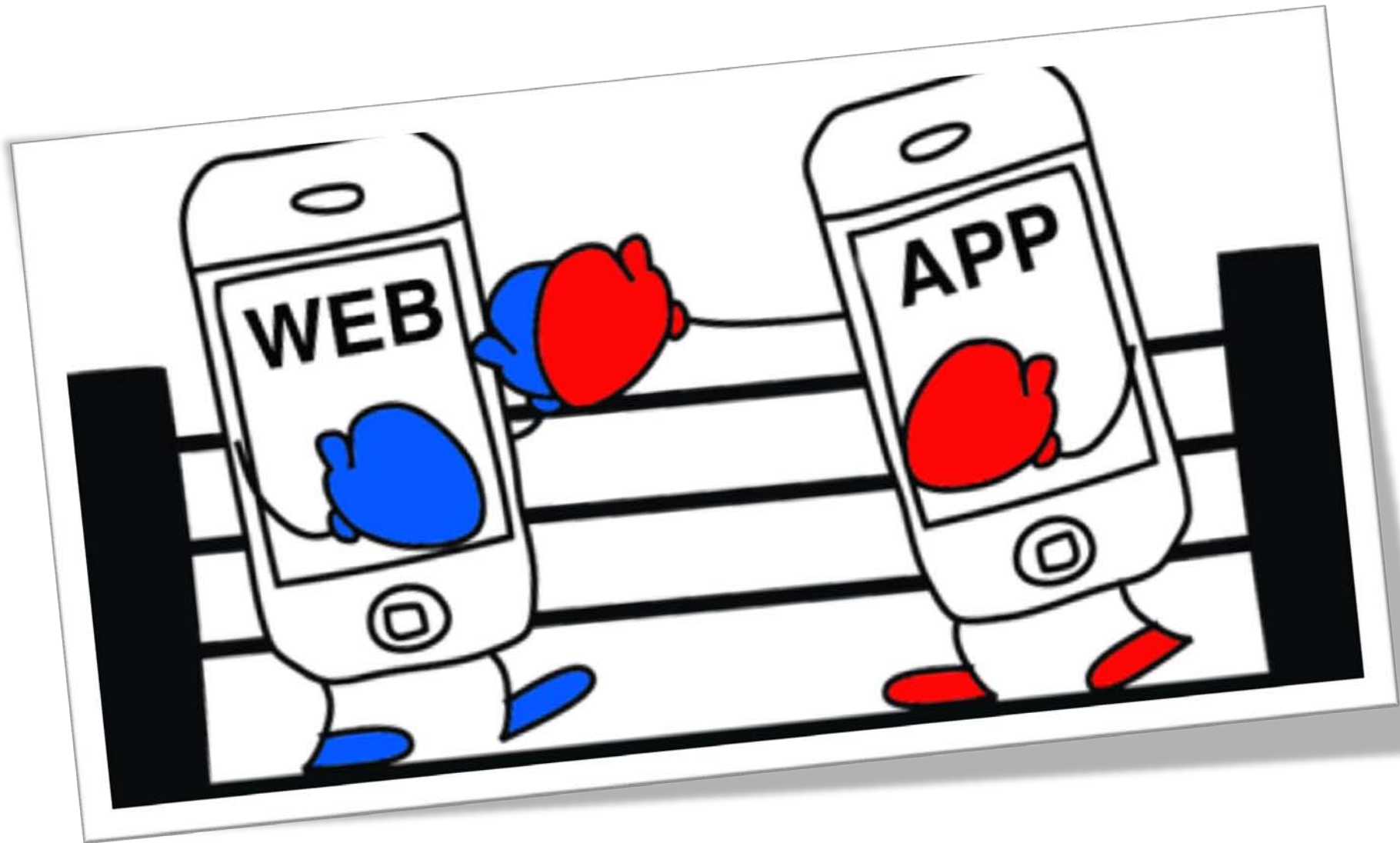


3G 9:41 AM

- Messages
- Calendar
- Photos
- Camera
- YouTube
- Stocks
- Maps
- Weather
- Notes
- Utilities
- iTunes
- App Store
- Settings
- Phone
- Mail
- Safari
- iPod









**Mobile Website**

**VS**



**Standard Website**

# Going Mobile: Two Approaches

Content  
Centered



Device  
Centered



# Information Literacy: Fixed or Mobile

	“Fixed” IL	“Mobile” IL
<b>Where?</b>	Largely in “set” places. At a desktop computer (with little variation in software); at a fixed workplace; within a library.	Anywhere; any mobile device (phone, games device, eBook reader – massive variation in device).
<b>What?</b>	Anything and everything.	Normally quick information, often context or location specific.
<b>How?</b>	Range of established tools to access and manage wide range of information sources. Standard search engines.	Often narrow Apps and individual specialist sites rather than open web.
<b>Time spent?</b>	Varies. Often slow, long access. People spending long periods searching for, organising and extracting information, especially for academic use.	Quick / Fast only. Shorter searches. Little pondering and extracting information. Favour short chunks of info. “Convenience” of device.

Walsh, Andrew and Godwin, Peter (2012) It’s just not the same: mobile information literacy. In: M-libraries 3: Transforming libraries with mobile technology. Facet, London, pp. 109-118.

# Information Literacy: Evaluating Resources

- Scholarly or Popular?
- Author
  - Know who creates the content
  - Know who creates the app
- Is the information objective?
  - Identify the sponsor of the content/app
- Is the information up to date?
  - Identify the update schedule
- Access issues
  - Print, Electronic, App?



Challenges

Strengths



# Mobile's Impact on Libraries: Resources

- Install Instructions:
  - <http://library.uchc.edu/departm/cec/hh/hhsoft.html>
- Licensed Apps
  - DynaMed
  - Lexi-Comp
  - VisualDx

iPad 11:16 AM

Clear All Drug ID

Imprint

+ Add Imprint

Dosage Form

(Unknown)

Shape

(Unknown)

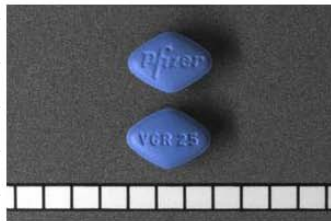
Colors

+ Add Color



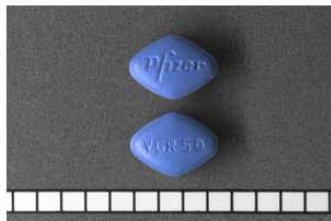
Generic Name:  
**LamoTRigine**

Imprint: **9 3 7248**  
Form: **Tablet**  
Shape: **Diamond**  
Color(s): **Blue**



Generic Name:  
**Sildenafil**  
Brand Name:  
**Viagra®**

Imprint: **Pfizer VGR 25**  
Form: **Tablet**  
Shape: **Rounded Diamond**  
Color(s): **Blue**



Generic Name:  
**Sildenafil**  
Brand Name:  
**Viagra®**

Imprint: **Pfizer VGR 50**  
Form: **Tablet**  
Shape: **Rounded Diamond**  
Color(s): **Blue**



Generic Name:  
**Sildenafil**  
Brand Name:  
**Viagra®**

Imprint: **Pfizer VGR 100**  
Form: **Tablet**  
Shape: **Rounded Diamond**  
Color(s): **Blue**

Library Info Update Interact Drug ID

# Lexi-Comp

iPad 11:12 AM 96%

Search Hydrocodone and Acetaminophen Jump

## Pharmacologic Category

- [Analgesic Combination \(Opioid\)](#)

## Dosing: Adult

**Pain management (analgesic):** Oral (doses should be titrated to appropriate analgesic effect): Average starting dose in opioid naive patients: Hydrocodone 5-10 mg 4 times/day; the dosage of acetaminophen should be limited to  $\leq 4$  g/day (and possibly less in patients with hepatic impairment or ethanol use).

*Dosage ranges (based on specific product labeling):* Hydrocodone 2.5-10 mg every 4-6 hours (maximum dose of hydrocodone may be limited by the acetaminophen content of specific product)

## Dosing: Geriatric

Doses should be titrated to appropriate analgesic effect; 2.5-5 mg of the hydrocodone component every 4-6 hours. Do not exceed 4 g/day of acetaminophen.

## Dosing: Pediatric

**Pain management (analgesic):** Oral (doses should be titrated to appropriate analgesic effect):

Children 2-13 years or  $< 50$  kg: Hydrocodone 0.1-0.2 mg/kg/dose every 4-6 hours; do not exceed 6 doses/day or the maximum recommended dose of acetaminophen

Children  $\geq 50$  kg: Refer to adult dosing.

## Dosing: Hepatic Impairment

Use with caution. Limited, low-dose therapy usually well tolerated in hepatic disease/cirrhosis; however, cases of hepatotoxicity at daily acetaminophen dosages  $< 4$  g/day have been reported. Avoid chronic use in hepatic impairment.

## Use: Labeled Indications

Relief of moderate-to-severe pain

## Contraindications

Hypersensitivity to hydrocodone, acetaminophen, or any component of the formulation; CNS depression; severe respiratory depression

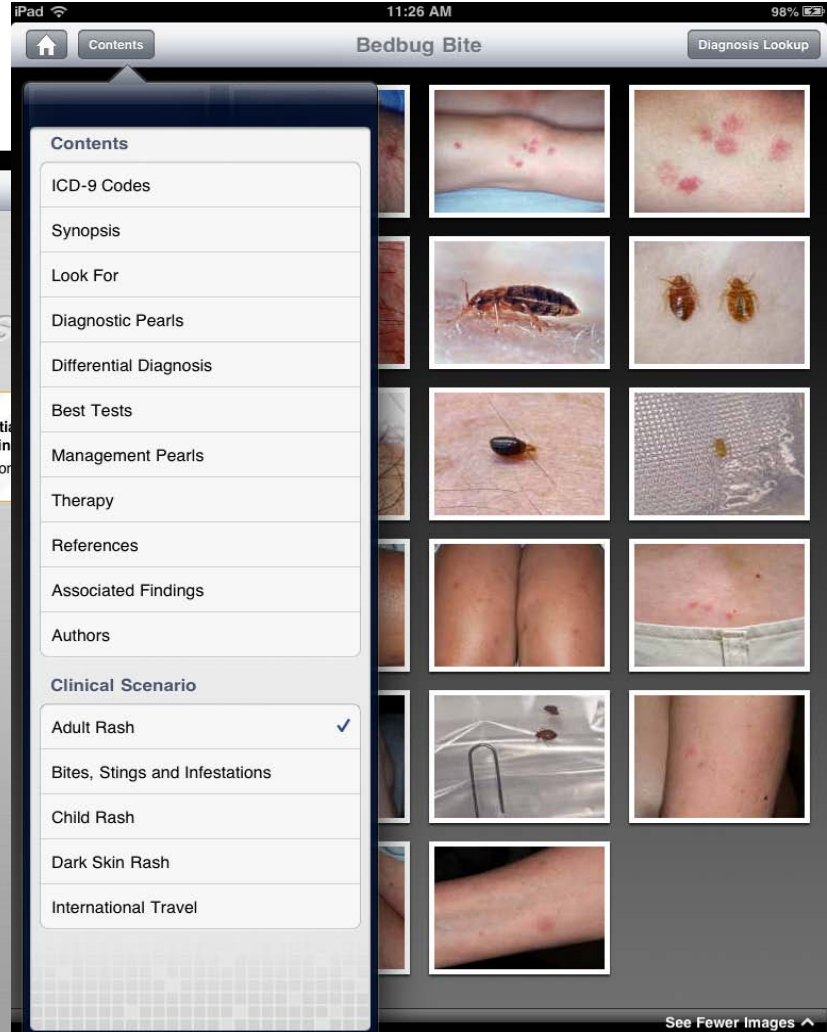
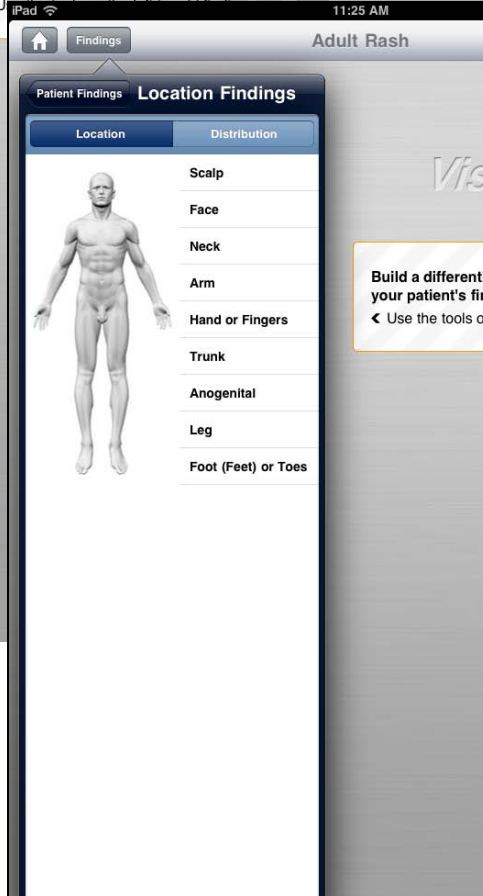
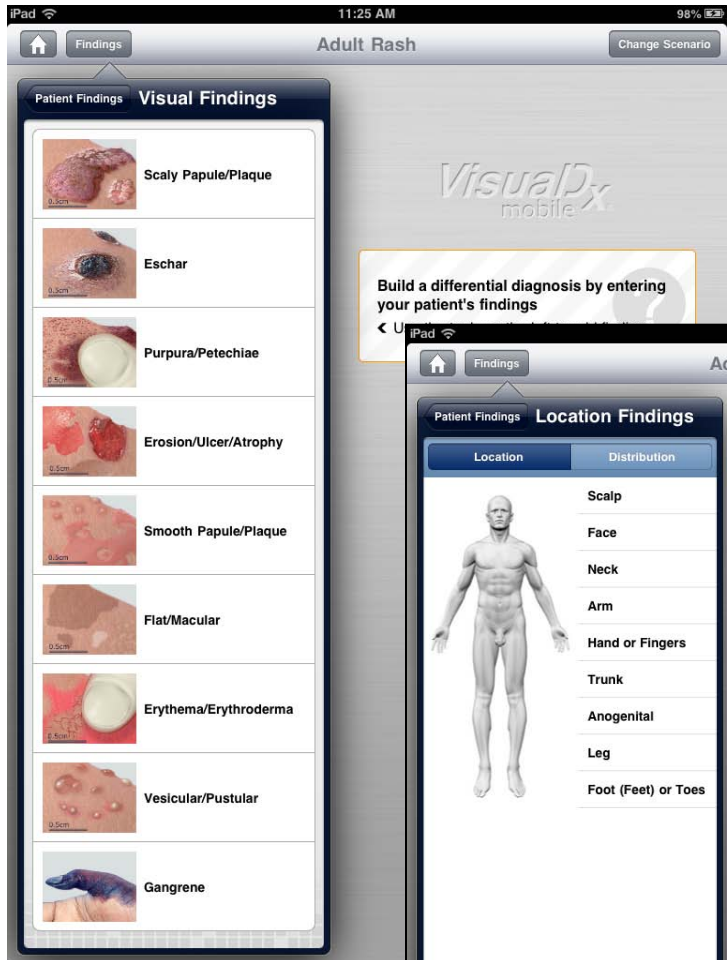
## ALERT: U.S. Boxed Warning

The FDA-approved labeling includes a boxed warning. See Warnings/Precautions section for a concise summary of this information. For verbatim wording of the boxed warning, consult the product labeling or [www.fda.gov](http://www.fda.gov).

Library Info Update Interact Drug ID Calc IV Compat



# VisualDx



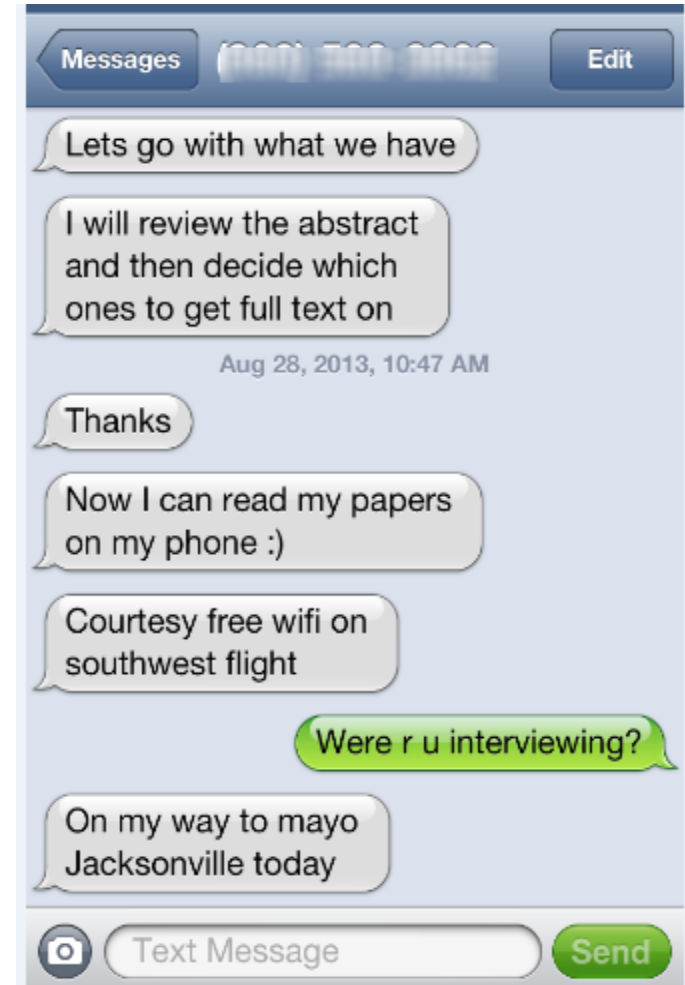
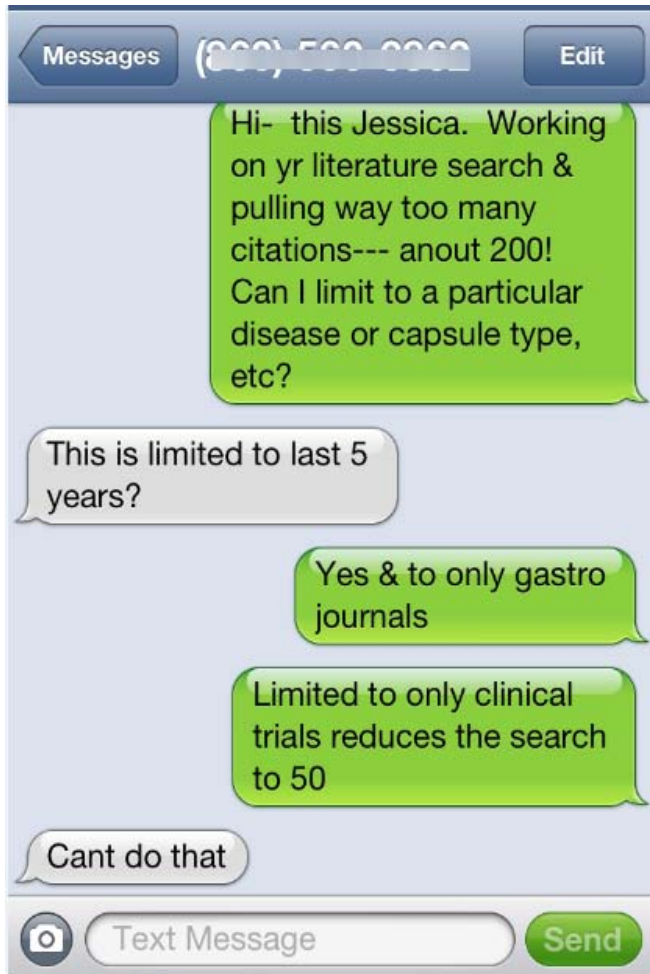
# Mobile's Impact on Libraries Reference Desk Interactions



Do you have this?

# Mobile's Impact on Libraries

## Reference Interview, Literature Search, Access to Full Text?



# Mobile Future

- Consumer Health
  - MyFitness Pal, Glucose Buddy, Ovulation Tracker
- Productivity Tools
  - Dropbox, EverNote
- Clinical Research
  - mHealth
  - PTSD research



# Card Exchange

- On the front of your index card, write your name and email address
- Take away
  - On the back of your index card, write how you will apply what you learned today
- Network
  - Exchange cards with another participant
  - Send a follow-up email in month to your partner to see how they are using mobile in their library

# Questions for us?

