Creating the capacity for change: Technology amplifying information

David Hale

U.S. National Library of Medicine

U.S. National Institutes of Health





Mobile
Social networks
Challenges and contests
Open data tools
White House policy

Mobile New Apps & Developing Guidance



NLM Mobile Working Group



Share

- Add →

∰ Tools ▼

§2 Added by Heiland-Luedtke, Jenny (NIH/NLM) [E], last edited by Ma, Wei (NIH/NLM) [E] on Jul 17, 2012 (view change)

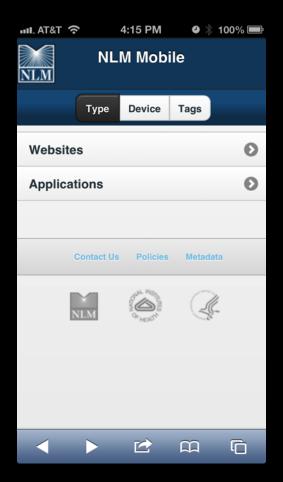
- Group Members
- Meetings
- Schedules/Deadlines
- Guidance

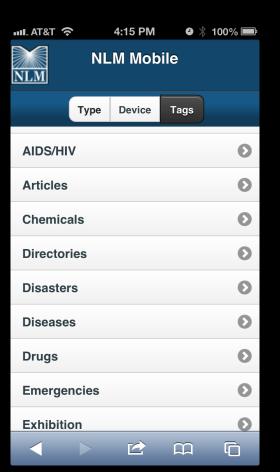
Group Members

- · Antani, Sameer
- · Canese, Kathi
- · Chang, Florence
- · Hale, David
- · Heiland-Luedtke, Jenny
- · Hui, Chris
- Ma, Wei
- · Potvin, Joseph

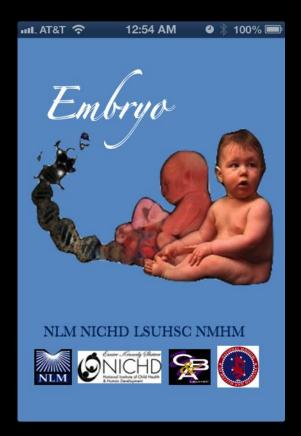
Schedules/Deadlines

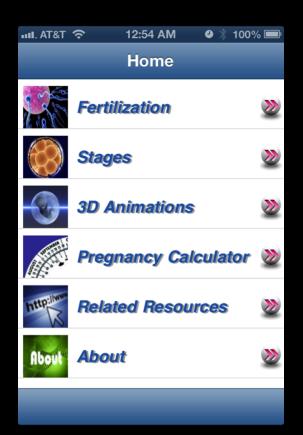
Task	Description	Resources	Deadline	Status	Comments
New Mockup for NLM Mobile Web page	Group agrees to improve current NLM Mobile Web page (redesign, function, etc.) for Web users and mobile device users.	Jenny Heiland- Luedtke Joe Potvin	6/22/2011	Done	 They will demo to group at next group meeting 6/22: Desktop Mockup approved moving forward with Proof of concept-Facets.
Make Mockup to be functional		Joe Potvin Jenny Heiland- Luedtke	7/20/2011	Assign	 Condition: If group approves new mockup (approved 6/22) Need to decide how to translate desktop mockup choice to mobile display Status update DUE 7/6 with clear progress. Roles: Joe: technical Jenny: tags

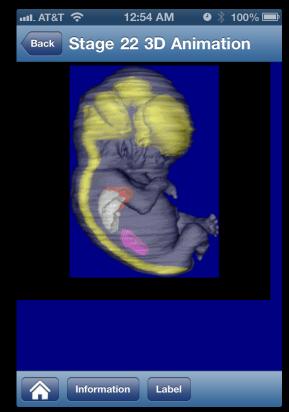




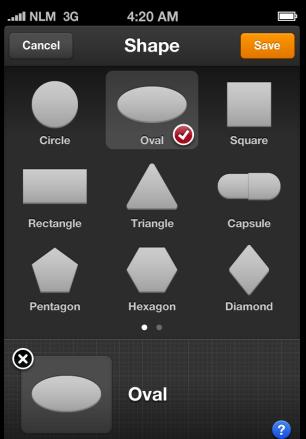
















Guidance on Mobile Apps vs. Mobile Web



Share





Added by Heiland-Luedtke, Jenny (NIH/NLM) [E], last edited by Heiland-Luedtke, Jenny (NIH/NLM) [E] on Oct 13, 2011 (view change) show comment

Overview

- Definition
- How to make decision (Type of content, user goals, network and device capability, user interface/presentation, input/output, cost, etc.)
- Bundle Apps (pro/con)

Assigned to:

Due date:

	Mobile-optimized Website	Mobile Application
Architecture	Web page formatted for display on a mobile device.	Web page formatted for display on a mobile device.
Online/Offline Use	Online only. Generally requires an Internet connection for data access.	Online OR offline. Dependent on where data lives (Cloud via API or on-device).
Platforms	Accessible on a variety of device platforms (iPhone, Android, BlackBerry, etc.) with a web browser.	Runs on only one platform. Versions for each platform must be programmed separately.

Three key areas of comparison are architecture, online and offline use, and platforms. A mobile website is a website that has been formatted and designed for use on a mobile device with a web browser, such as a smartphone. A mobile application is a program that is installed on a particular platform, such as an iPhone or Android phone. A mobile-optimized website generally requires an Internet connection, be it through a cellular network or wifi hotspot. While the necessity of a network connection introduces liabilities in situations where a connection is unavailable, such as disaster-response or in rural areas, pulling data from the Internet allows connections to vast datasets, such as BLAST or PubMed. Mobile applications on the other hand have the option to include relevant data within the program itself. This decision is based on the needs of user. NLM's Radiation Emergency Medical Management mobile application includes its data in the program, allowing REMM to be used in the event of a radiological disaster. The potential liability of mobile applications is that versions for each platform, for the most part, must be programmed separately. This increases costs and development time. It does, however, provide access to the unique functionality of each platform. The Adobe Flex framework may offer a "code once, compile everywhere" solution, however it is too soon to know the longevity and viability of this platform. NLM has experimented with compiling Flex apps on multiple tablet devices with success, however it requires substantial technical expertise and updates to the Flex framework have, in the past, broken compatibility with previous versions, requiring the refactoring of applications. A single mobile website however, is accessible on a variety of devices.

Articles/interviews on native vs web apps that may help expand this information.

http://mkblog.exadel.com/2011/04/mobile-apps-choices-native-apps-vs-web-apps/

http://mobithinking.com/native-or-web-app





App of Apps Implementation - Final Round



Share



§1 Added by Potvin, Joseph (NIH/NLM) [E], last edited by Potvin, Joseph (NIH/NLM) [E] on Jun 27, 2012 (view change)

Please use comments on this page to discuss the two remaining items on our feedback list

- 1. Do we change from Native Application to "Applications" and Mobile Websites to "Websites"?
- 2. Do we alphabetize the apps?

Labels None 🖉

→ 6 Comments



Potvin, Joseph (NIH/NLM) [E]

Jun 27, 2012

Here's my \$.02.

on point 1. I realize we are in a mobile context here, but the reason I like Mobile Websites is it follows the practice of "comfort signs" and "don't make users think" those two words tell them exactly what they will find when they click on the button. On Native Apps, Again it might be redundant and it may be unnecessary for some, but we are telling users that these apps are made explicitly for the device listed. That will matter to some and not to others.

on point 2. No opinion, although we may want to highlight new/important apps.

Edit · Remove · Reply





Hale, David (NIH/NLM) [E]

Jun 27, 2012

I say yes to both. "Websites/applications" is in my opinion a clear disinction because of the contrast of the single terms, while "mobile websites/native applications" introduces ambiguity by causing the user to ask questions like "what's a 'native' application?" For #2, users expect alphabetization unless there is a clear communication of a different ordering scheme.

Edit Remove Reply









Complete Page List

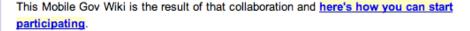
- Wiki Home
- Recent Changes
- Pages and Files
- Members
- Manage Wiki

home



Welcome to the Mobile Gov Wiki!

Mobile technology is changing the way people find and use information and services. The Mobile Gov Community of Practice launched the Making Mobile Gov Project at to help federal agencies make a more open, innovative government by providing information and services anytime, anywhere and on any device.





Digital Strategy Help

- · Agency Digital Strategy Pages
- APIs
- Mobile Strategy
- Mobile Gov Experiences Directory
- Mobile Definitions
- <u>Discussions on Consensus Good</u>
 <u>Practices</u>
- Mobile Web
- Native Apps
- Responsive Design
- SOW and Developer Qualifications
- Digital Government Strategy
- <u>Digital Services Innovation Center</u>

Things to Do

- Help us Build <u>Consensus Mobile Good Practices</u> for federal agencies to use to build Mobile Gov!!!!!
- Check out what's new
- Work on a page! Anyone (you don't have to be government) with a
 wikispaces account with a member profile that includes your name
 and an organizational affiliation can create new pages and edit
 entries on this wiki.
- Add tags to help people find info, fix grammar or reorganize a page for clarity. Do as much as you want. This is perpetual beta-each entry is always under development. Try it!
- Share a <u>Mobile Gov Experience</u> & list it in the <u>Mobile Gov Experiences Directory</u>
- View Mobile Series Webinar recordings



Social networks PAHO and Caregivers

Social Media in Disasters

Area on Emergency Preparedness and Disaster Relief



3.2. What should be the profile of the person in charge?

It is important to establish structure, policies, and leadership at your organization to more effectively manage Social Media. Frequently, we find that the person responsible for starting and updating a Social Media tool is part of the communications team of the office but the organization do not always have staff available for this task. However, it is highly recommended that this person possesses the necessary sensitivity and basic knowledge about the emergency response and is able to share and/or ask colleagues for more details.

It is also recommended to have one person in charge of Social Media strategy and two/three people with administrator access to these tools in case this person is out of the office or can not update these channels during an emergency.

At some point after using Social Media, it is a good idea to establish boards and councils to develop guidance, policies, standards, and recommendations around the use of Social Media. The lessons learned below may guide you in initiating your own Social Media communication experience.

Top 10 Lessons Learned from using Social Media

- 1- Always reply to your public and do not forget to say: thank you!
- Encourage participation and make it easy for people to share your messages.
- Positives experiences and pictures attract more public/followers.
- 4- Pay attention to your work area and try to post up to date information about it. Do not post old links.
- 5- Like yourself and complete your posts with more comments.
- 6- Keep it simple and short.
- 7- Don't be afraid of trying new tools and innovate.
- 8- Find your own voice. Do not just repeat messages from others.
- 9- Constant training on new social networks (updated) is essential.
- Listen to your audience and ask for their opinion (Survey webs as: surveymonkey, twtpoll.com, act.ly,...).

3.3. What information should we use?

Social Media allows for the tailoring of messages to help express empathy and acknowledge concern, promote action, and listen to what people are saying about health NLM 4 Caregivers Timeline *

Like



Being a caregiver can sometimes be stressful. Getting a restful night's sleep is important for you to recharge yourself. Here are some tips for creating a healthy sleep environment to maximize rest:

http://www.nlm.nih.gov/medlineplus/news/fullstory_12964 4.html



Like · Comment · Share





Recent Posts by Others on NLM 4 Caregivers

See All



Jennifer Pakiam

l knew kids were caregivers too, but I had no idea j...

October 5 at 11:32am



Nalini Mahajan

Information Connections plans to celebrate Down S... October 3 at 8:32am



Information Connections

Don't forget to like Information Connections on Fac... October 2 at 4:37pm



KidCompanions -Chewelry

@ Searching for cool CHEWY or hand FIDGET? Need a c... September 27 at 7:23am



Eman Khaled

http://blogs.jpmsonline.com/2012/08/11/idoctor-... September 26 at 9:18am

More Posts -

Recommendations

See All

Write a recommendation...



Julie Daech

A wealth of great information here! Thank you!

△ 1 · about 8 months ago



A service of the U.S. National Library of Medicine

NIH National Institutes of Health

Home About MedlinePlus Site Map FAQs Contact Us

Search MedlinePlus G0

Health Topics

Drugs & Supplements

Videos & Cool Tools

ESPAÑOL

Health Day



Related MedlinePlus Pages

Bone Density

Osteoporosis

Teen Health





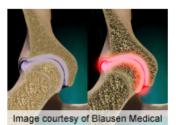




Teen Girls Need Bone Health Advice to Stave Off Osteoporosis

Experts update guidelines on screening, prevention for women of all ages

By Mary Elizabeth Dallas Friday, August 24, 2012



FRIDAY, Aug. 24 (HealthDay News) — Along with adult women, teen girls should receive medical advice about bone health and the lifestyle factors that could affect their risk for fractures or osteoporosis, such as smoking, poor eating habits and too much weight loss, according to newly released guidelines on osteoporosis.

By talking to teenagers about how to keep their bones strong,

obstetricians and gynecologists help their young patients prevent bone loss while they are at their peak bonebuilding stage, experts from the American College of Obstetricians and Gynecologists, which issued the guidelines Tuesday, explained in a college

news release.

Osteoporosis is five times more prevalent in women than men, and fractures are twice as common in women, they noted in the news release.

The American College of Obstetricians and Gynecologists recommends that women aged 65 and older have bone-mineral-density screenings. Dual-energy X-ray absorptiometry (DEXA) scans often are used to diagnose osteoporosis of the lumbar spine and hips. Younger women should undergo this test only if they have bone fractures or significant risk factors for osteoporosis, and if patients have no new risk factors, DEXA scans should not be performed more than once every two years.



🖒 Like

Help your teen girl prevent osteoporosis!

 $http://www.nlm.nih.gov/medlineplus/news/fullstory_128609.html$



Teen Girls Need Bone Health Advice to Stave Off Osteoporosis: MedlinePlus www.nlm.nih.gov Guidelines on screening and prevention for women of all ages.

Like · Comment · Share



4 people like this.

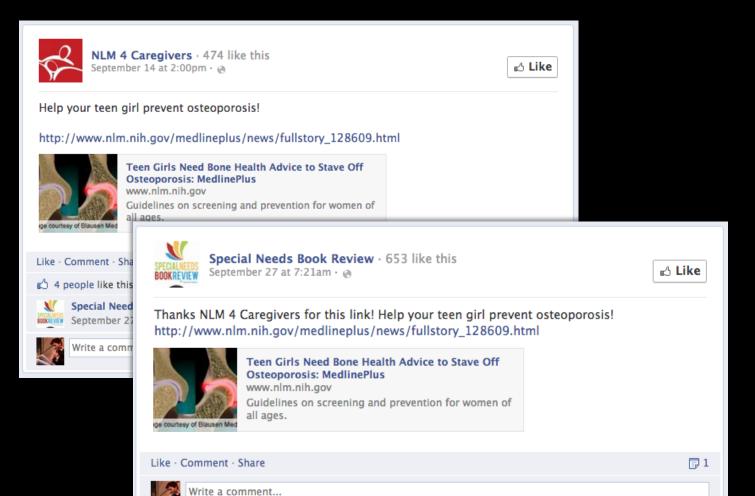


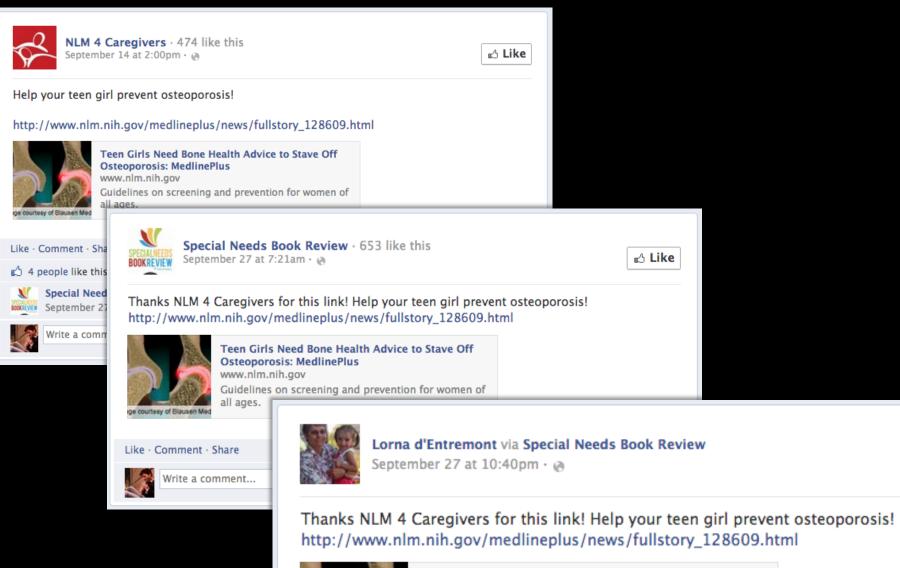
Special Needs Book Review Thanks NLM 4 Caregivers for this link! Sharing >>

September 27 at 7:21am · Like



Write a comment...





ge courtesy of Blausen Med

Teen Girls Need Bone Health Advice to Stave Off Osteoporosis: MedlinePlus www.nlm.nih.gov
Guidelines on screening and prevention for women of all ages.

Challenges and contests New engagement strategies



Home

Find Challenges

About

e.g.: "Apps" or "Health"

SEARCH

On Challenge.gov, the public and government can solve problems together.

SIGN UP AND PARTICIPATE

or Learn More



Featured Challenges



Equal Futures App Challenge

by The White House

The White House Council on Women and Girls is launching the Equal Futures App Challenge. Successful apps will promote civic education and inspire girls to serve as leaders in our democracy.







Recent Challenges



Health Design Challenge

by Office of the National Coordinator for Health Information Technology



38 days left to submit



\$50,000 in prizes

Browse Challenges

CATEGORIES

Defense (22)

Economy (23)

Education (48)

Energy & Environment (43)

Government and Public Policy (1)

Health (80)

International Affairs (6)

Jobs (15)

Personal and Public Safety (23)

Science & Technology (101)

Technology (4)

NLM Show Off Your Apps: Innovative Uses of NLM Information





139 followers



Closed (view all dates)



Rules

Submission Gallery

Discussions

NLM is challenging people to create innovative software applications that use the Library's vast collection of biomedical data.

VIEW THE WINNERS



Thank you to all of the Entrants that participated in NLM's first software challenge!

Winners Gallery

WINNERS HONORED AT AN NLM AWARDS PRESENTATION NOV 2 2011.



GLAD4U: deriving and prioritizing gene lists from PubMed literature



iAnatomy







Quertle - Find What Matters with Semantic Searching of the Biomedical Literature



NLMplus - a Semantic Search and Discovery Engine





Share











Recent Followers

VIEW ALL FOLLOWERS >

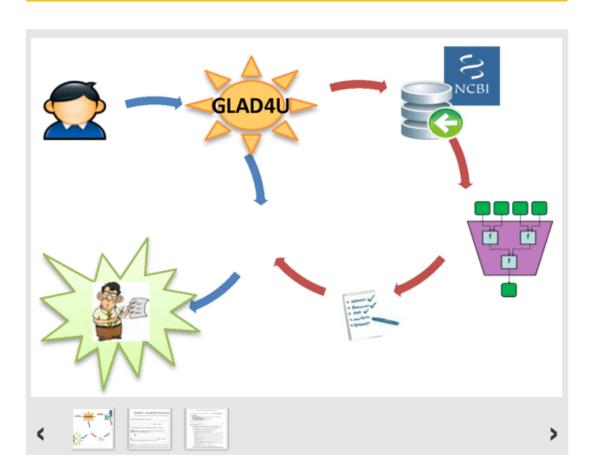




GLAD4U: deriving and prioritizing gene lists from PubMed literature

http://bioinfo.vanderbilt.edu/glad4u

Winners honored at an NLM awards presentation Nov 2 2011.



Answering questions such as "Which genes are related to breast cancer?" usually requires retrieving relevant publications through the PubMed search engine, reading these publications, and creating gene lists. This process is not only time-consuming, but also prone to errors.



Submitted by





Other information

Date entered: August 07, 2011



Open data tools Mega concerts, island vacations, and geek fights

Lollapolooza



Health data-polooza



Consumer health information

- Drugs
- Diseases
- Lab tests





Clinical trials registry

- Conditions
- Interventions
- Clinical trials

Unified Medical Language System

- Terminology integration
- Synonyms

UMLS

Connect

DailyMed

NDF-RT

RxNorm

RxTerms

PubChem

- Small molecules
- Bioassays

Entrez Gene Gene properties (names, functions,

Drug information

- RxNorm: Drug names/codes
- NDF-RT: Clinical properties
- RxTerms: Physician-friendly drug names
- DailyMed: Structured Product Labels

Drug information

- Pill identification
- Pill images

Clinical

Trials

MetaMap

PillBox

MTI

PubChem

PubMed

Central

PubMed

Entrez Gene

e-utils

Information extraction/Indexing services

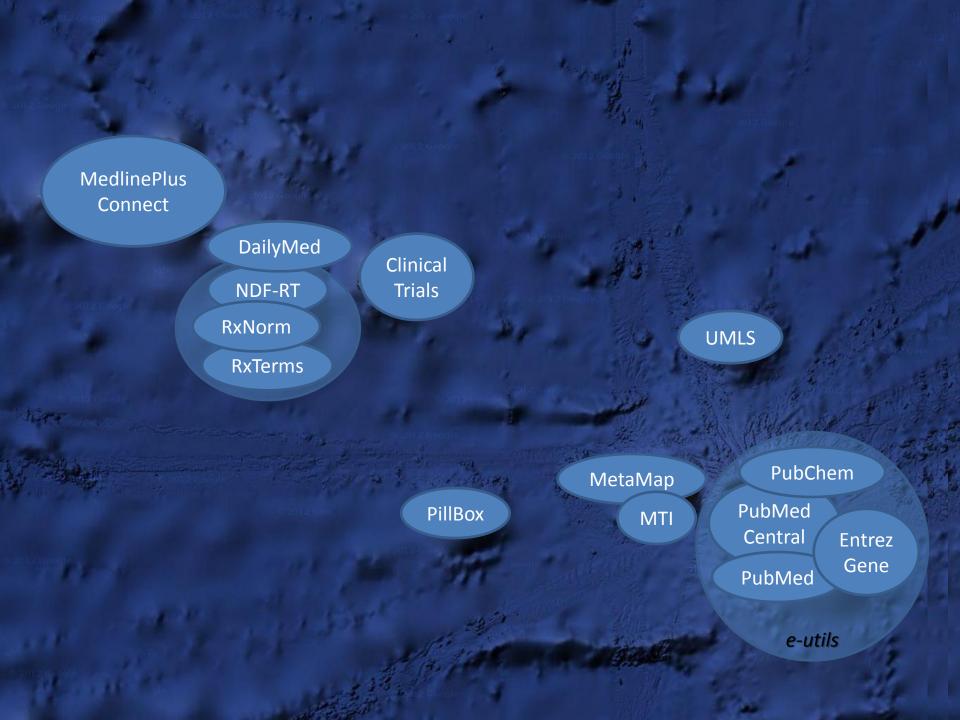
- MetaMap identifies biomedical concepts in text
- MTI indexes biomedical text

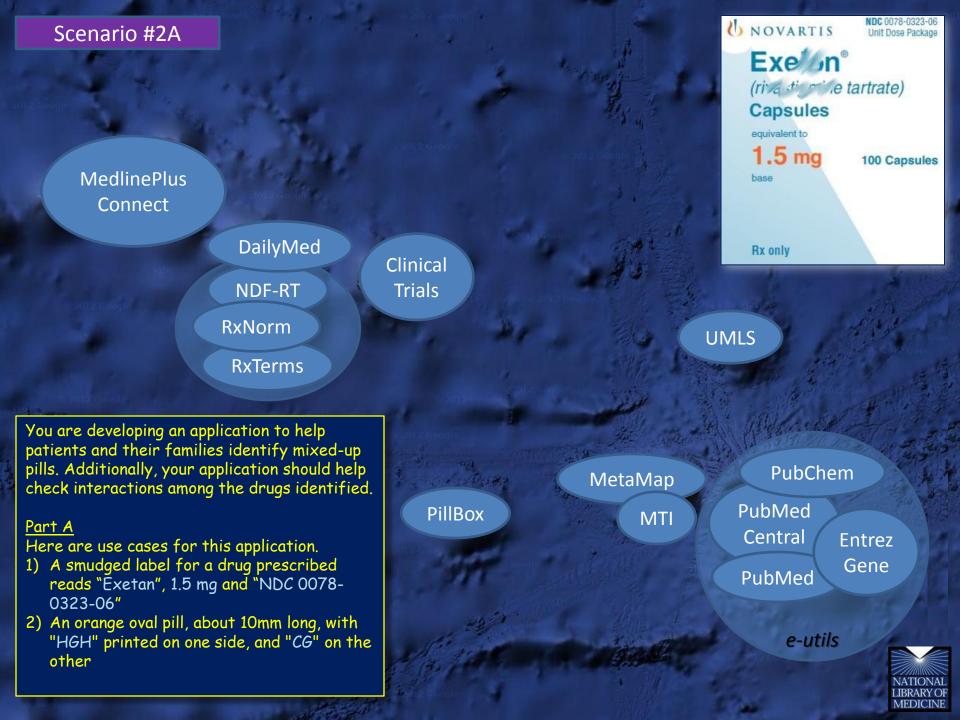
PubMed / PMC

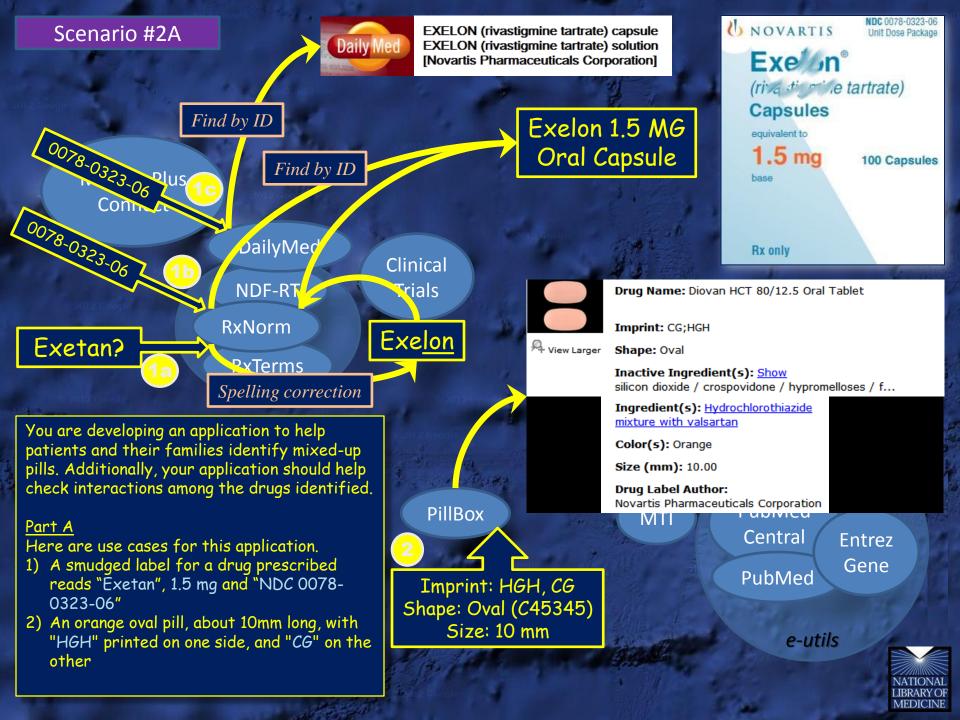
- **PubMed**: MEDLINE bibliographic information
- PMC: Full-text articles













PillBox API – Find pill by characteristics

Imprint, shape, color(s), size, ...

http://pillbox.nlm.nih.g ov/pillimage/search_re sults.php?getimprint=< imprint>&getshape=<s hape>&getsize=<size> &submit=Search

List of pill(s) identified

PillBox API – Find pill by characteristics

023

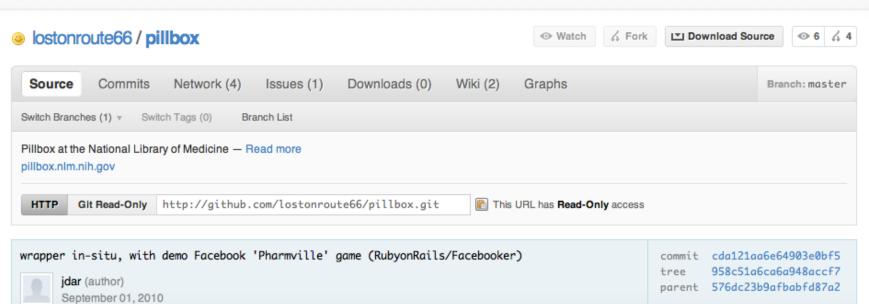
- Imprint: HGH, CG
- Shape: Oval (C45345)
- Size: 10 mm

http://pillbox.nlm.nih.g ov/pillimage/search_re sults.php?getimprint=**H GH+CG**&getshape=**C48 345**&getsize=**10.00**&su bmit=Search



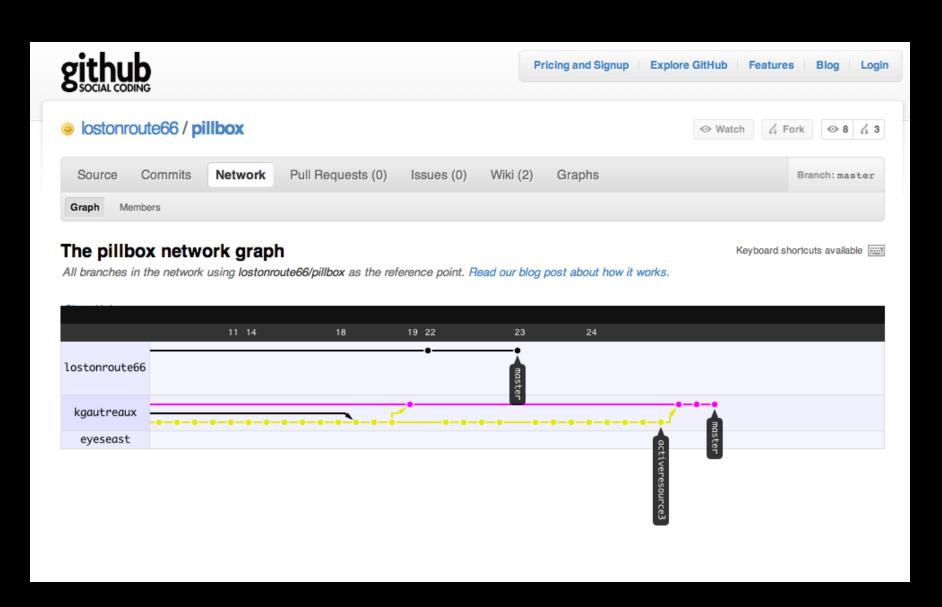


Home | Pricing and Signup | Training | Gist | Blog | Login



pillbox /

name	age	message	history
	December 17, 2009	Having parsing trouble here [eyeseast]	
README	December 19, 2009	fixed color-shape lookup [Darius]	
extras/	September 01, 2010	wrapper in-situ, with demo Facebook 'Pharmville [jdar]	
pillbox.py	December 19, 2009	Added images. [eyeseast]	
pillbox_resource.rb	January 27, 2010	params keys can be symbols, multi-color support [jdar]	
pillbox_resource_noko.rb	December 16, 2009	added simple ruby wrappers [Darius]	



Medpass.es

KausKumbie,

LAUNCH SITE

FAVORITE

2012 Rumble Sponsors

This is an entry in the **2012 Rails Rumble**. After checking it out, we encourage you to leave feedback and then take a look at the hundreds of other amazing entries.



By "SMIK Industries"

Description

Generate iOS6 Passbook passes for your medications.

Resources

Interested in seeing what was used to build this application? Resources may include things like open source libraries, third party APIs, and icons.

gems:

'pry'

'brakeman'

'mysql2'

'dalli'

'jquery-rails'

'pillboxr', '>= 0.8.2'

'passbook'

'grocer'

'pass_renderer'

'capistrano'

3rd party API:

http://pillbox.nlm.nih.gov











Discussion *

Community





Thom Parkin a day ago

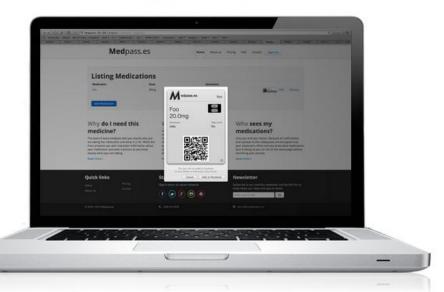
Great idea. This is a service I would find useful.

It is in my Top Ten (top 5 actually)





Never forget to take a medication again.



Medpasses help you remember what you are taking, when you are taking it, and why it is important.



Why do I need this medicine?

The back of every medpass tells you exactly why you are taking the medication and what it is for. While the front presents you with important information about your medication and even a picture so you know exactly what your are

When should I take it?

Using Apple's push notification system your medpasses will notify you when it is time to take your meds, and if there is a change in your dose or type of medication made by your doctor the changes will be automatically reflected in the medpass. No more spending hours on the

Who sees my medications?

Only you and your doctor. Because all notifications and updates to the medipasses are encrypted only your physician's office and you know what medications you're taking so you can be on the same page without sacrificing

Created by Keith Gautreaux (#39)

White House policy Opening up and catching up

20 January 2009

Transparency, Participation, Collaboration



9 December 2010



25 POINT IMPLEMENTATION PLAN TO REFORM FEDERAL INFORMATION TECHNOLOGY MANAGEMENT

Vivek Kundra
U.S. Chief Information Officer

DECEMBER 9, 2010



Create change within government

Table of Contents

Introduction
PART I: ACHIEVING OPERATIONAL EFFICIENCY
A. Apply "Light Technology" and Shared Solutions
1. Complete detailed implementation plans to consolidate at least 800 data centers by 2015. . 5
2. Create a government-wide marketplace for data center availability
3. Shift to a "Cloud First" policy
4. Stand-up contract vehicles for secure laaS solutions
5. Stand-up contract vehicles for commodity services $\ldots \ldots \ldots \ldots 8$
6. Develop a strategy for shared services
PART II: EFFECTIVELY MANAGING LARGE-SCALE IT PROGRAMS
B. Strengthen Program Management
7. Design a formal IT program management career path
8. Scale IT program management career path government-wide
9. Require integrated program teams
10. Launch a best practices collaboration platform
11. Launch technology fellows program
12. Enable IT program manager mobility across government and industry
C1. Align the Acquisition Process with the Technology Cycle
13. Design and develop a cadre of specialized IT acquisition professionals
14. Identify IT acquisition best practices and adopt government-wide
15. Issue contracting guidance and templates to support modular development $\dots \dots 19$
16. Reduce barriers to entry for small innovative technology companies

23 May 2012



Create change outside government



Table of Contents

Introduction	1
Part A. Information-Centric	9
1. Make Open Data, Content, and Web APIs the New Default	0
2. Make Existing High-Value Data and Content Available through Web APIs	1
Part B. Shared Platform	3
3. Establish a Digital Services Innovation Center and Advisory Group	3
4. Establish Intra-Agency Governance to Improve Delivery of Digital Services	5
5. Shift to an Enterprise-Wide Asset Management and Procurement Model	6
Part C. Customer-Centric	9
6. Deliver Better Digital Services Using Modern Tools and Technologies	9
7. Improve Priority Customer-Facing Services for Mobile Use	1
8. Measure Performance and Customer Satisfaction to Improve Service Delivery	2
Part D. Security and Privacy	3
9. Promote the Safe and Secure Adoption of New Technologies	4
10. Evaluate and Streamline Security and Privacy Processes	4
Conclusion	7
Appendix: Roadmap Milestones	9

Creating the capacity for change: Technology amplifying information

Mobile
Social networks
Challenges and contests
Open data tools
White House policy

Creating the capacity for change: Technology amplifying information

David Hale

U.S. National Library of Medicine

U.S. National Institutes of Health





Links

- http://www.nlm.nih.gov/mobile/
- http://www.nlm.nih.gov/mobile-app/
- https://wiki.nlm.nih.gov/confluence/display/nlmmobile/NLM+Mobile+Working+Group#NLMMobileWorkingGroup-SchedulesDeadlines
- https://wiki.nlm.nih.gov/confluence/display/nlmmobile/App+of+Apps+Implementation+-+Final+Round
- https://wiki.nlm.nih.gov/confluence/display/nlmmobile/Outline+for+Mobile+Guidance+Document
- http://mobilegovwiki.howto.gov/
- http://mobilegovwiki.howto.gov/MedlinePlus+Mobile+Evaluation
- http://challenge.gov/
- http://showoffyourapps.challenge.gov/
- http://bioinfo.vanderbilt.edu/glad4u/
- http://www.whitehouse.gov/open
- http://www.scribd.com/doc/44998824/25-Point-Implementation-Plan-to-Reform-Federal-IT
- http://www.whitehouse.gov/sites/default/files/omb/egov/digitalgovernment/digital-government-strategy.pdf