HEALTH & SAFETY AT THE TOUCH OF A FINGER

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OBJECTIVES

- Explore the concept of media literacy and various tools available to the occupational health professional.
- Review specific regulatory agencies associated with safe technology use and recommendations.
- Identify specific virtual tools and mobile applications that can be used to improve employee safety, health, and wellness.
Consider how you integrate social media tools into your professional role to improve quality.
HOW CONNECTED ARE YOU???

- Estimate how much time you spend a day on social media (phone, computer, other devices)
- What is the longest time you have been without social media? How did you feel when you were not connected?
- Do you agree that social media has made us more isolated, not more social?
- When considering a movie, TV show, etc....would you be more inclined to review this product from a review in a newspaper or a review from a Facebook friend? What factors influence your decision?
WHAT IS MEDIA LITERACY?

- the ability to access, analyze, evaluate, and create media.

  - Newspapers
  - Radio
  - Television
  - Social Media
COMMUNICATION TOOLS FOR OCCUPATIONAL HEALTH PROFESSIONALS

- Social Media
- Mobile Apps
- Websites
- Blogs
- YouTube
- Syndication, RSS Feeds

All can be used to improve quality care and outcomes!!
- Also known as web logs/weblogs
- Similar to a journal
- Reverse chronology of events, comments, links, etc.
- Over 100 Million “Blogs” in the “Blogosphere”
- Blogging utilized for business, political and society issues
- Should be
  - well organized
  - clearly defined goals and intent
  - have ability to archive
  - list a contact person
Developed in 2005 by 3 former PayPal Employees

Allows users to upload, view, rate, share and comment on videos

Pew Research called this “visual journalism”

Movie clips, training, music, raise awareness, “how to’s”

“Going viral!!!!”
SYNDICATION/RSS FEEDS

- Really Simple Syndication (RSS)
- “feed”, “webfeed”, “channel”
- “Channels” are typically in XML format
- Frequently updated information
- Subscribers receive timely updates
- No need to manually check for updates…automatically download to the user
- Specialized software can feed the RSS to mobile devices, webpages, etc…
WEBSITES

- A website/web site is a set of related pages, typically served from one domain and by one web server.

- Domain name
  - .com
  - .org
  - .gov
  - .edu
  - .mil
  - .net

- Can be used for personal, commercial, government, military educational, etc....
The communication tool or method you choose should be appropriate for the audience, content, purpose, and message giver of the communication.

When evaluating communication tools, consider the following:

- Number of people involved
- Type of info to be shared
- Amount or volume of info being communicated
- Frequency of exchange
- Desire/need for discussion or response
- Sensitivity of the message and expected audience reaction
- Privacy needs
- Security needs
- Need for live communication
- Interest in recording or reviewing communications later
INTERNET RESOURCES

For the Occupational Health Professional
Site, Publisher, Audience, Timeliness
Evaluating Internet Health Information: A Tutorial from the National Library of Medicine

- This tutorial teaches you how to evaluate the health information that you find on the Web. It is about 18 minutes long.
- You need the Flash plug-in, version 8 or above, to view it. If you do not have Flash, you will be prompted to obtain a free download of the software before you start.
- The tutorial runs automatically, but you can also use the navigation bar at the bottom of the screen to go forward, backward, pause, or start over.

Take charge of your health!
Use this easy tool to get personalized health recommendations for yourself or a loved one.

Age: 
Sex:  
Female  Male
Get Results

http://www.healthfinder.gov/myhealthfinder/
6. Is it balanced and unbiased?

**Rating this Question**

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Partially</th>
<th>3</th>
<th>Yes</th>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Hint:** Look for:

- a clear indication of whether the publication is written from a personal or objective point of view
- evidence that a *range* of sources of information was used to compile the publication, e.g. more than one research study or expert
- evidence of an external assessment of the publication.

**Be wary if:**

- the publication focuses on the advantages or disadvantages of one particular treatment choice without reference to other possible choices
- the publication relies primarily on evidence from single cases (which may not be typical of people with this condition or of responses to a particular treatment)
- the information is presented in a sensational, emotive or alarmist way.


15 Item Questionnaire
CAMbasics - 5 quick questions
5 W's

http://nccam.nih.gov/health/webresources
From Snake Oil to Penicillin: Evaluating Consumer Health Information on the Internet

Course Description
This hands-on course will describe why it is important to evaluate websites. Participants will be given criteria for how to evaluate health information on the Internet.

Objectives
Learn how to evaluate health information sites on the internet using the following criteria:
- Accuracy
- Authority
- Bias
- Currency
- Coverage

Course Materials
- [From Snake Oil to Penicillin Course Exercises](http://nnlm.gov/training/consumer/snakeoil/)
- [From Snake Oil to Penicillin Course Powerpoint Presentation](http://nnlm.gov/training/consumer/snakeoil/)

For additional PowerPoint slides, please contact [Jim Ottoen](mailto:jim.ottoen@nnlm.gov), Consumer Health Coordinator, NNLM, SE/A Region.

[Offer Course web-based -URLs](http://nnlm.gov/training/consumer/snakeoil/)
NIH

DDHS

List of 12 Questions

http://ods.od.nih.gov/Health_Information/How_To_Evaluate_Health_Information_on_the_Internet_Questions_and_Answers.aspx
How can you be careful about cancer information on websites, YouTube, blogs, Facebook, and e-mail?

Online sources of health information should make it easy for people to learn who is responsible for posting information, the original source of the information that is posted, and the medical credentials of people who prepare or review the material that is posted.

The Federal Trade Commission has produced a helpful video, posted at the right, that describes how you can be a careful consumer of health information that you find online. More resources are listed below.

Questions You Should Ask
1. Who manages this information?

The Federal Trade Commission developed this video to help people maintain a healthy level of skepticism when they are searching for information about cancer so that they don’t become victims of fraud.

Offer Video

http://www.cancer.gov/cancertopics/cancerlibrary/health-info-online
Places To Start
There are a few good places to start if you are looking for online health information. An excellent source of reliable information is the National Institutes of Health (www.nih.gov). You can start here to find information on almost every health topic, including:

- managing heart disease (www.nhlbi.nih.gov)
- dealing with deafness (www.nidcd.nih.gov)
- taking care of dentures (www.nidcr.nih.gov)
- caring for a loved one with Alzheimer’s disease (www.alzheimer.org.nih.gov)

In addition, you can visit the National Library of Medicine’s Medline Plus (www.medlineplus.gov) for dependable information on more than 700 health-related topics.

You can also visit NISeniorHealth.gov (www.niseniormhealth.gov)—a website with health information designed specifically for older people.

A Quick Checklist
You can use the following checklist to help make sure that the health information you are reading online can be trusted. You might want to keep this checklist by your computer.

1. Can you easily see who sponsors the website?
2. Is the sponsor a Federal agency or a medical school, or is it related to one of those?
3. Can you find the mission or goal of the sponsor of the website?
4. Can you see who works for the agency or organization and who is the author? Is there contact information?
5. Can you tell when the information was written?
6. Is your privacy protected?
7. Does the website make claims that seem too good to be true? Are quick, miracle cures promised?
ACCREDITING AGENCIES

Icons to look for
ACCREDITING AGENCIES

- URAC accredited health website
- TRUSTe certified privacy
- Semantic
- HONcode
- BBB
MOBILE APPS

- A **mobile app** is a computer program designed to run on mobile devices (i.e., smartphones, tablets).
- “Apps” were originally created for retrieving email, stock quotes, and weather updates.
- # of Apps in 2018
  - Android: 3.8 Million
  - Apple: 2.2 Million
<table>
<thead>
<tr>
<th>Rank</th>
<th>Social Media</th>
<th>Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Facebook</td>
<td>2,130,000,000</td>
</tr>
<tr>
<td>2.</td>
<td>YouTube</td>
<td>1,500,000,000</td>
</tr>
<tr>
<td>3.</td>
<td>Instagram</td>
<td>800,000,000</td>
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<tr>
<td>4.</td>
<td>Qzone</td>
<td>563,000,000</td>
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<tr>
<td>5.</td>
<td>Twitter</td>
<td>376,000,000</td>
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<tr>
<td>6.</td>
<td>Reddit</td>
<td>330,000,000</td>
</tr>
<tr>
<td>7.</td>
<td>Pinterest</td>
<td>200,000,000</td>
</tr>
<tr>
<td>8.</td>
<td>Ask.F</td>
<td>60,000,000</td>
</tr>
<tr>
<td>9.</td>
<td>Tumblr</td>
<td>115,000,000</td>
</tr>
<tr>
<td>10.</td>
<td>Flickr</td>
<td>112,000,000</td>
</tr>
<tr>
<td>11.</td>
<td>Google+</td>
<td>111,000,000</td>
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<tr>
<td>12.</td>
<td>LinkedIn</td>
<td>106,000,000</td>
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<td>13.</td>
<td>VK</td>
<td>97,000,000</td>
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<td>14.</td>
<td>Odnoklassniki</td>
<td>71,000,000</td>
</tr>
<tr>
<td>15.</td>
<td>Meetup</td>
<td>35,300,000</td>
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</table>

• mENVIRONMENT
• mSAFETY
• mHEALTH
• mMEDICALRESOURCES
ENVIRONMENT

- Haz-Mat Reference and Emergency Response Guide
- How’s my Waterway
- NIOSH Pocket Guide to Chemical Hazards
- NIOSH Ladder Safety App
- MSDS Mobile by KHA
- Environmental Impact Calculator
- Creek Watch App
- The Green Gumshoe App
- Airstatus!
<table>
<thead>
<tr>
<th>Idea Description</th>
<th>Topic</th>
<th>Data Availability</th>
<th># of Votes</th>
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<tbody>
<tr>
<td>Create an app where users can check on the status of nearby water bodies.</td>
<td>Water</td>
<td>☢️</td>
<td>62</td>
</tr>
<tr>
<td>Determine who a member of public should notify if they see someone polluting a</td>
<td>Regulatory and Industrial</td>
<td>☢️</td>
<td>46</td>
</tr>
<tr>
<td>ground site or water body.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a GIS app that would track the user’s location to provide environmental</td>
<td>Air, Soils and Land, Water</td>
<td>☢️</td>
<td>40</td>
</tr>
<tr>
<td>information about the surrounding area.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Create an application that allows users to take a picture of runoff on their</td>
<td>Water</td>
<td>☢️</td>
<td>35</td>
</tr>
<tr>
<td>property and submit it to a business that can analyze it for solutions.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Develop an app that provides the user with data on the quality and regulation</td>
<td>Water</td>
<td>☢️</td>
<td>32</td>
</tr>
<tr>
<td>violations of their local drinking water.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a list of all of the different recycling numbers and symbols, so that</td>
<td>Pollution Prevention</td>
<td>☢️</td>
<td>29</td>
</tr>
<tr>
<td>users would be able to know if something is recyclable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop an application that would list and show eco-volunteer opportunities in</td>
<td>Emergencies and Cleanup</td>
<td>☢️</td>
<td>28</td>
</tr>
<tr>
<td>the users area.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create an app that allows users to identify a product via barcode scan or item</td>
<td>Human Health, Pollution</td>
<td>☢️</td>
<td>28</td>
</tr>
<tr>
<td>lookup and find details about the product from an environmental perspective.</td>
<td>Prevention</td>
<td></td>
<td></td>
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</table>
mSAFETY

- Incident Cost Calculator
- iJSA
- NIOSH Ladder Safety App
- Electrical Safety Test App
- iAuditor
- NIOSH Lift Index
- FallClearSafe
- LiveSafe
- Pulse Point
- Pocket CPR
- WatchOverMe
• Working Safely Is No Accident (website)
• USW Chemical Safety app
• Nojack.net
93% of physicians say mobile health apps can improve patients’ health outcomes

89% of physicians would recommend an mHealth app to a patient

58% of doctors note a key mHealth benefit is providing patients with appointment alerts and reminders

2 in 3 physicians say mHealth apps linked to an EHR could bolster medication adherence

1 in 2 believes mHealth apps could benefit patients with diabetes and improve preventive care.

January 2013 physician survey by eClinicalWorks
• Lose it! app
• GoodGuide app
• Fooducate app
• Healthy Habits (A health & happiness app)
• The Quit Companion
• My Lil Coach
• Breathe2Relax
HEALTHeGAMING

- Foodflight
- Joulebug
- Solve the outbreak!
- USDA Apps for Healthy Kids
  - Pick Chow!
  - Papaya Head.com
  - The Snack Neutralizer
  - Work it Off
  - The Hungry Hiker
  - Food Hero
  - Food Buster
  - Fitter Critters
  - Smash your Food
  - Trainer
  - Balanced Meal
MEDICAL RESOURCES

• UptoDate
• Epocrates
• eMedicine
• MPR
• Tabers
• CDC Opioid Guidelines
• CDC STD Treatment
• CDC Vaccine Schedule
• CDC Antibiotic Guidelines
• EKG Academy
• Family Practice Notebook
• Harriett Lane
• CareZone
SMART PHONE PHYSICAL EXAM

http://epmonthly.com/article/on-the-go-the-smartphone-physical/
TOP 10 MEDICAL APPS FOR DOCTORS

- Epocrates
- Pepid
- UpToDate
- Doximity
- ReadbyQXMD
- NEJM This Week
- Isabel
- Figure1
- Dynamed
- Medscape
- Virtual Practice for Doctors

https://blog.capterra.com/top-7-medical-apps-for-doctors/
SO.......WHERE DO I BEGIN??????
HOW CAN I BECOME “SOCIAL” IN OCCUPATIONAL HEALTH & SAFETY?

Before getting started.....ask yourself the following:

- Why do I want to participate in social media?
- What do I hope to achieve by using social media?
- Who am I trying to reach (customer, employee, colleague)?
- What problems do my customers/employees need help solving?
- What tools are right for me and my customers/employees?
IF YOU BUILD IT…..THEY WILL COME....
BUILDING AN APP: QUICK STATS

- The average app takes about 3-4 months to build
- The cost to build an app $5,000 to $1.00,000 +
- The cost to maintain an app – 15-20% of the original development price.
- The time to get your app into an “app store”- 4-6 days
WHO REGULATES THE INFORMATION SHARED ON A MOBILE APP?

- US Food and Drug Administration
  - MedWatcher Mobile App
- Federal Trade Commission
The communication tool or method you choose should be appropriate for the audience, content, purpose, and message giver of the communication.

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- Privacy needs
- Security needs
- Need for live communication
- Interest in recording or reviewing communications later
LOOKING TO DEVELOP A MOBILE HEALTH APP?

- Federal Trade Commission
  - Health Insurance Portability and Accountability Act (HIPAA)
    - The Office for Civil Rights (OCR) within the U.S. Department of Health & Human Services (HHS) enforces the HIPAA rules, which protect the privacy and security of certain health information and require certain entities to provide notifications of health information breaches.
  - Federal Food, Drug, and Cosmetic Act (FD&C Act)
    - The FDA enforces the FD&C Act, which regulates the safety and effectiveness of medical devices, including certain mobile medical apps. The FDA focuses its regulatory oversight on a small subset of health apps that pose a higher risk if they don’t work as intended.
  - Federal Trade Commission Act (FTC Act)
    - The FTC enforces the FTC Act, which prohibits deceptive or unfair acts or practices in or affecting commerce, including those relating to privacy and data security, and those involving false or misleading claims about apps’ safety or performance.
  - FTC’s Health Breach Notification Rule
    - The FTC’s Health Breach Notification Rule requires certain businesses to provide notifications following breaches of personal health record information.
FTC Releases New Guidance For Developers of Mobile Health Apps

Tool Created in Conjunction with HHS and FDA Will Help Businesses Determine Applicable Laws and Regulations

FOR RELEASE
April 5, 2016

The Federal Trade Commission has created a new web-based tool for developers of health-related mobile apps, which is designed to help the developers understand what federal laws and regulations might apply to their apps. The FTC developed the tool in conjunction with the Department of Health and Human Services’ Office of National Coordination for Health Information Technology and the US Food and Drug Administration’s Center for Devices and Radiological Health.

TAGS: Health Care | Technology | Mobile | Bureau of Consumer Protection | Consumer Protection | Privacy and Security | Consumer Privacy | Data Security
Minimize data.
Limit access and permissions.
Keep authentication in mind.
Consider the mobile ecosystem.
Implement security by design.
Don’t reinvent the wheel.
Innovate how you communicate with users.
Don’t forget about other applicable laws.
Five steps organizations can take to manage mobile devices used by health care providers and professionals

These five steps are intended to help organizations manage mobile devices in a health care setting.
AS A CONSUMER, HOW ARE MOBILE APPLICATIONS HELPFUL TO ME?

- The Future of Healthcare: How Mobile Medical Apps Give Control Back to Us
INTEGRATING SOCIAL MEDIA INTO MY PRACTICE
SOCIAL MEDIA AT CDC

Social Media Tools
- Buttons and Badges
- Campaigns
- Content Syndication
- Data & Metrics
- eCards
- Guidelines & Best Practices
  - Image Sharing
  - Mobile / Tablet Apps
  - Online Video
  - Podcasts
  - Social Networking
  - Widgets

Guidance Tools
- Writing for Social Media
- Buttons and Badges
- Facebook
- Twitter

Current Campaign
- The NIOSH Ladder Safety application features a multimodal indicator, which uses visual and sound signals to assist the user in positioning an extension ladder at an optimal angle.

CDC Podcasts
- A Minute of Health with CDC (mp3)

Current Buttons and Badges
- HEALTH IS A HUMAN RIGHT

Top Facebook Pages
1. CDC
2. Act Against AIDS
3. NIOSH

Top Twitter Feeds
1. CDC Emergency
2. CDC eHealth
3. CDCԳՏ
AS A MEDICAL PROFESSIONAL, HOW ARE MOBILE APPLICATIONS HELPFUL TO MY PRACTICE, MY PATIENTS, AND MY EMPLOYEES?
Dr. Kim Olszewski
kolszews@bloomu.edu