CROWDSOURCING AND MEDICINE

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OBJECTIVES

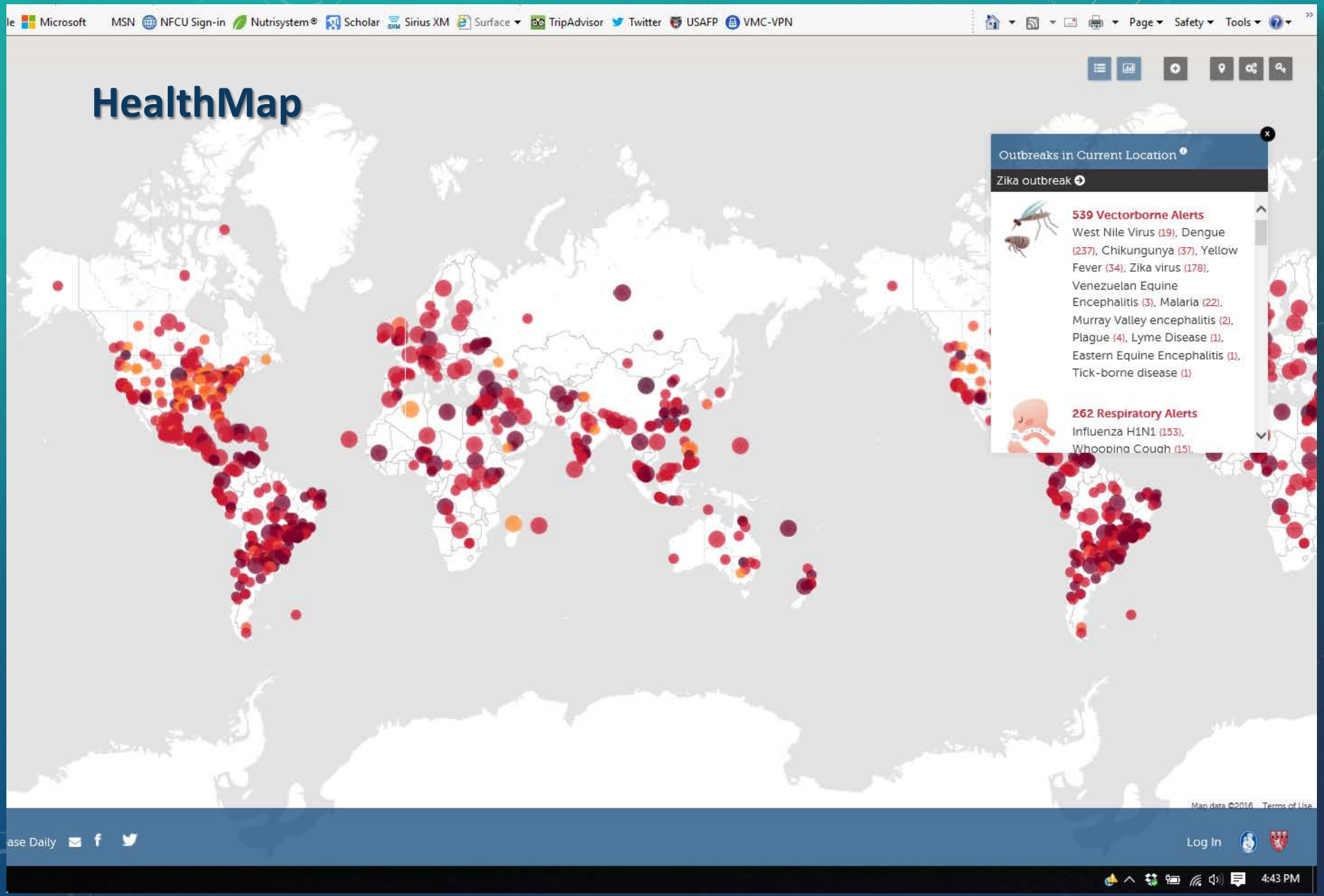
WHAT IS CROWDSOURCING?

- Term coined in 2006 by Wired Magazine editors
- The process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, especially an online community, rather than from employees or suppliers
- Crowdsourcing combines the efforts of numerous self-selected volunteers or part-time workers; each person's contribution combines with those of others to achieve a cumulative result

TOP 5 MEDICAL CROWDSOURCING SITES

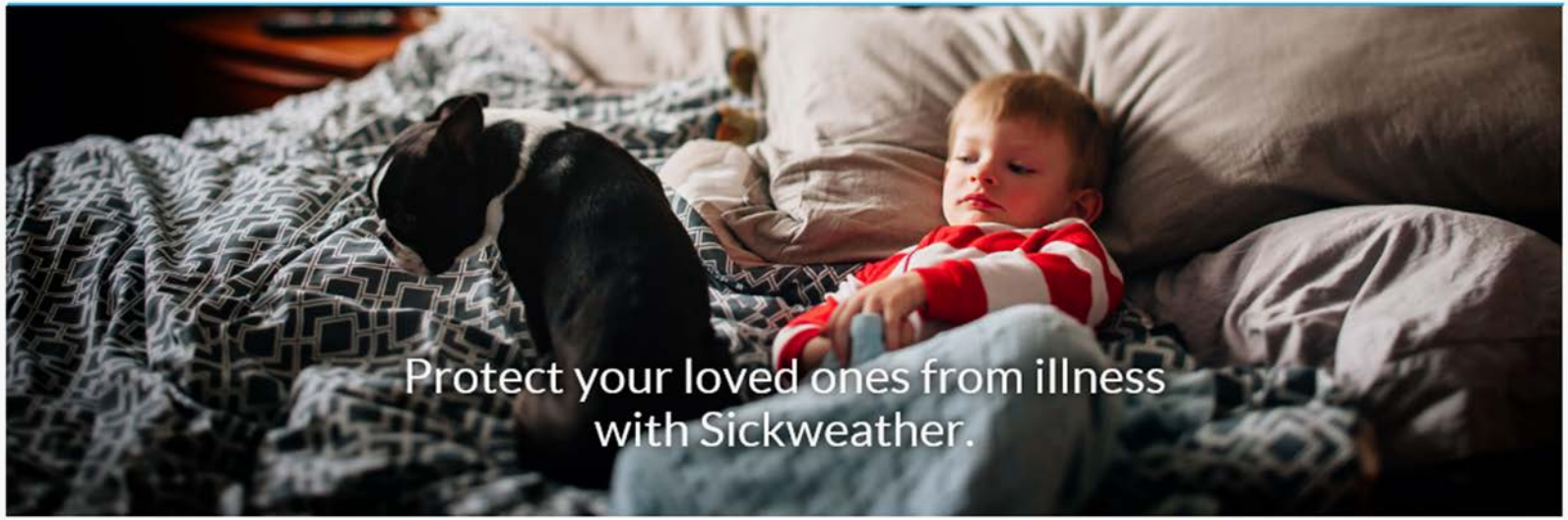
- **HealthMap.org** - HealthMap.org monitors outbreaks such as Swine Flu and SARS around the world
- **SickWeather.com** - Sickweather.com searches your social networks for indicators of illness. It allows users to track conditions, compare symptoms and measure the proliferation of a virus in a specific region
- **Google Flu Trends** – no longer publishing data – was very useful
- **Global Public Health Intelligence Network (GPHIN)** - subscription-based service that monitors Internet media in nine languages in order to help detect and report potential disease outbreaks or other health threats around the world (appears to no longer be active – archived in 2013)
- **CrowdMed.com** - believes that diagnosis should be a team effort and invites everyone —practitioners, patients and the public at large — to be an “MD” (medical detective). By harnessing “the wisdom of crowds” to help solve complicated medical cases

HealthMap


Microsoft
MSN
NFCU Sign-in
Nutrisystem®
Scholar
Sirius XM
Surface
TripAdvisor
Twitter
USAFP
VMC-VPN
Page
Safety
Tools
Outbreaks in Current Location
Zika outbreak
539 Vectorborne Alerts
West Nile Virus (19), Dengue (237), Chikungunya (37), Yellow Fever (34), Zika virus (178), Venezuelan Equine Encephalitis (3), Malaria (22), Murray Valley encephalitis (2), Plague (4), Lyme Disease (1), Eastern Equine Encephalitis (1), Tick-borne disease (1)
262 Respiratory Alerts
Influenza H1N1 (153), Whooping Cough (15),
Map data ©2016
Terms of Use
Log In
4:43 PM

sickweather

Live Map Groups Alerts Blog Sign In

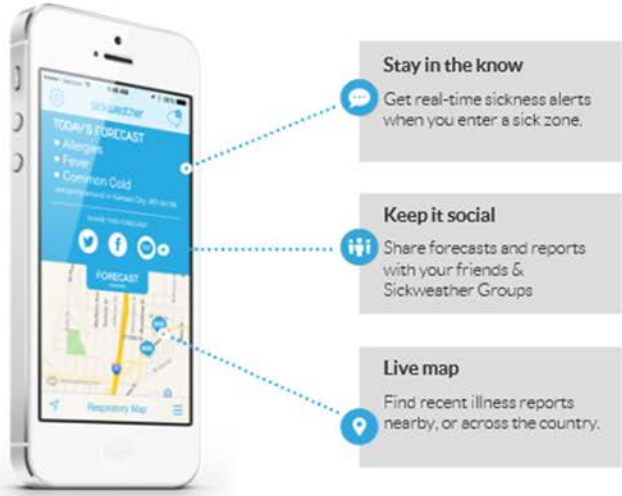


Download on the App Store ANDROID APP ON Google play

Sickweather - Sickness Forecasting & Mapping

Everyday thousands of people around the globe update social media sites like Facebook and Twitter when they (or someone close to them) get sick. Just as Doppler radar scans the skies for indicators of bad weather, Sickweather scans social networks for indicators of illness, allowing you to check for the chance of sickness as easily as you can check for the chance of rain.

See How Sickweather works



Sickweather Apple Watch App with SickScore®

Our new Apple Watch app has features to help keep you and your family

DTS FPIN Google Microsoft MSN NFCU Sign-in Nutrisystem® Scholar Sirius XM Surface TripAdvisor Twitter USAFP VMC-VPN

CrowdMed

TEDMED abc NEWS WALL STREET JOURNAL CBS

We're Here to Help

We've solved the cases of patients from around the world. Our community of case solvers work together...

I can't thank the founders of CrowdMed enough. After years of struggling and living in terrified uncertainty, I actually have a diagnosis and am beginning treatment.

Patient "Walter"
Washington, DC

CrowdMed has been the breath of fresh air for which I have been desperately searching for years. It may very well be the one thing that will give me back control of my life.

Patient "Tandra"
Macon, Georgia

All of the 'detectives' who participated were extremely helpful, friendly and conscientious in seeking more info. CrowdMed went beyond what any MD or specialist has done for me, so far.

Patient "Lizzette"
Monkstown, Canada

FOOD SOURCE INFORMATION WIKI

- Created in 2013 by Colorado School of Public Health and Colorado Department of Public Health and Environment
- Includes basic and timely information on food production practices and distribution systems
- Content written and reviewed by individuals and groups across the U.S.
- Aims are to bridge important knowledge gaps about foods suspected or implicated during foodborne illness outbreaks and improve outbreak response nationwide

Food Source Information
COLORADO INTEGRATED FOOD SAFETY CENTER OF EXCELLENCE

ABOUT FSI WIKI ARTICLES GLOSSARY NEWS CONTACT

A food production wiki for public health professionals

Find help! Enter search term here. Search

About

This Wiki is an interactive website created as a working guide to food production methods for public health professionals.

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FSI Wiki Articles

Articles include pages about production methods for individual food items. Please visit the contact page to become an editor.

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Contribute to the Wiki

Contribute to the wiki! Author a new article, edit or add onto an existing article, or suggest a topic using our submission form.

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Featured articles:

PATIENTSLIKEME

- Launched in 2004 as a Crowdsourcing capability to find a cure for ALS
- Has morphed into a data collection and sharing capability that would be considered the epitome of a learning healthcare system
- Now has 200,000 patients on it and tracks 1,800 diseases
- Includes such diseases as ALS, MS, Parkinson's, AIDS and mood disorders
- Has developed a number of tools to help patients quantify/objectify their symptoms
- Has become one of the best tools for helping patients and the health care system become partners in finding cures and palliative treatments

patientslikeme®

Already a member? Sign in.

conditions, symptoms, treatments...

Live better, together!™

Making healthcare better for everyone through sharing, support, and research

Join now

(it's free!)

Learn from others
Compare treatments, symptoms and experiences with people like you and take control of your health

Connect with people like you
Share your experience, give and get support to improve your life and the lives of others

Track your health
Chart your health over time and contribute to research that can advance medicine for all

Member Stories: Paul talks about thriving with bipolar

"Our brother Stephen was living with ALS and we thought, 'there has to be a better way.' There is. By sharing our experiences, we can all contribute new data that can accelerate research and help create better treatments. Our experiences can actually change medicine... for good."

Jamie & Ben Heywood
Co-founders, PatientsLikeMe

News

Digital Health Authority Monique Levy Joins PatientsLikeMe

Monique will use her extensive experience to shape how PatientsLikeMe's life science partners leverage patient-centered strategies and technologies to transform their operations and meet emerging patient needs.

Joy Morel Joins PatientsLikeMe

As Senior Vice President, Marketing, Patient Engagement and Business Intelligence, Joy will lead the team that focuses on attracting and engaging new members and business partners.

See all

CROWDMED

- Founded in 2012 and based on San Francisco
- Through Crowdsourcing, aims to identify illnesses that have gone without a diagnosis
- Has handled more than 400 cases since its launch in 2013 at TEDMED
- Most useful for patients with rare, unsolved conditions
  - Sick for eight years
  - Seen eight different doctors
  - Spent $60,000+ in medical expenses
- 70% of patients using CrowdMed say it has helped them get closer to correct diagnosis or cure

THE GOOD AND THE BAD

- CrowdMed has helped a number of patients; however,
- Bioethicists are concerned about the lack of privacy on the site as well as accuracy of diagnoses
- Regulatory experts feel CrowdMed is the “unauthorized practice of medicine”
- Some viewers feel that medical information has no place in Crowdsourcing
  - Feel that the site gives too much freedom to people suggesting all sorts of treatment suggestions that desperate patients may try and have harmful outcomes as a result
- The premise is to talk with various physician experts in the field to find a diagnosis and cure…but that does not always happen

https://www.crowdmed.com/case-selection

Unsolved Medical Cases, M...

CrowdMed

Submit a Case | Solve Medical Cases | How it Works | About U

Recommended
Highest Cash Compensation
Highest Point Reward
Highest Quality
Most Difficult
Most Recent
Ending Soonest
Random

Unsolved Medical Cases

Search Medical Cases

#7518

Advanced Osteoporosis

26 | 14,000 | $0 | 280

Tom

59 year old male · California, United States

After two and a half years of chronic back pain, during which I tried a number of therapies and treatments, I finally went to see an orthopedic doctor. He took ...

Follow | Share | View

#5358

Chronic fatigue and chronic pain

5 | 21,000 | $150 | 79

Cassey

54 year old female · Washington, United States

Daily chronic fatigue is my primary symptom. I often wake up tired and remain so for most of the day. Even when I sleep I usually have no more that 2-4 hours pe...

Follow | Share | View

#2193

Multiple complaints

14 | 15,000 | $100 | 82

#6300

Debilitating fatigue palpitations breathlessness pain

16 | 17,000 | $100 | 190

BENEFITS OF CROWDSOURCING IN MEDICINE

- Benefit from the “Wisdom of the Crowd” in finding diagnoses and treatments for difficult to diagnose diseases and syndromes
    - This can be especially true if the “crowd” includes physicians across the country or globe with significant expertise
- With a large online community, such as PatientsLikeMe, can aggregate data on patients with uncommon diseases to help with both treatment research and improved diagnostic tools
- Can get peer or medical professional psychosocial support for dealing with a difficult illness/disease

PROBLEMS/CONCERNS

- Patient privacy
- Accuracy of the diagnoses from the “crowd”
- Benefit/harm ratio of treatments from the “crowd”
- Cost/benefit ratio of the subscription service for paid crowdsourcing sites
- Participation of non-medical “crowd” members who may give advice that ultimately is harmful or misleading

CONCLUSIONS

- Crowdsourcing as a concept has good literature support in the non-medical fields…Wikipedia, Kickstarter, LEGO Ideas, etc
- Crowdsourcing in medicine has an excellent example, PatientsLikeMe, but it has moved well beyond just a crowdsourcing capability
- CrowdMed has yet to prove its worth beyond a few hundred patients, with a number of questions/concerns about its function
- The Food Source Information Wiki appears to be a solid and rapid source for foodborne illness information
- Overall, we are still in the infancy of crowdsourcing in medicine…and it may not ever pan out beyond public health applications

QUESTIONS AND COMMENTS