

# **SOCIAL MEDIA: FROM PERSONAL TO PUBLIC HEALTH**

Eli Perencevich, MD MS

Director, Center for Comprehensive Access and Delivery  
Research & Evaluation

Iowa City VA Health Care System

[eli.perencevich@va.gov](mailto:eli.perencevich@va.gov)

@eliowa

[www.stopinfections.org](http://www.stopinfections.org)

March 9, 2015

# Overview

- Publication overload
- Overcoming publication overload
  - Staying up-to-date on the latest medical science
  - Advancing our “lab’s” science to influence public health policy
    - Hey, we are in Iowa!
    - i.e. not in NYC, Boston, SF, LA and DC
- How I use Twitter and a Blog

# Poll Question

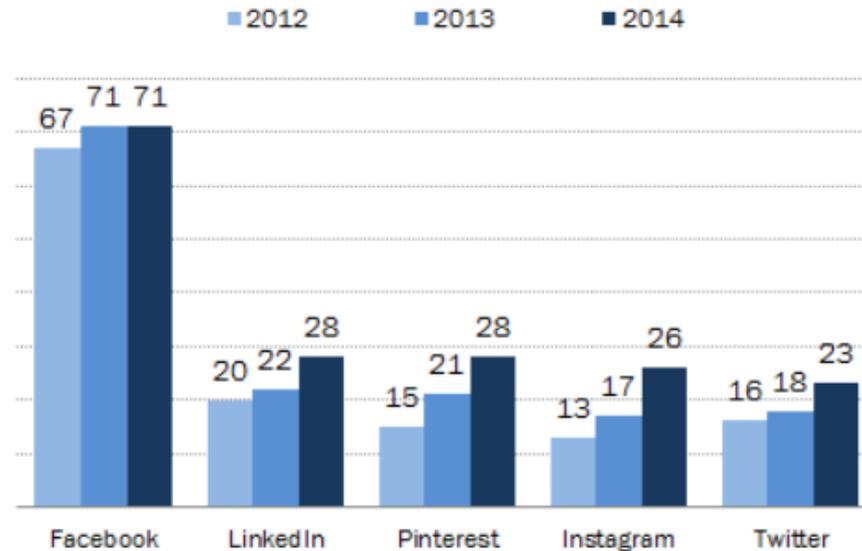
- Which social media platforms do you regularly use?
  - 1) I blog (Blogger, WordPress, etc)
  - 2) I use Facebook
  - 3) I use Twitter
  - 4) I use Twitter and Facebook
  - 5) I'm not actively using social media

# Social Media Adoption

---

## Social media sites, 2012-2014

*% of online adults who use the following social media websites, by year*



Pew Research Center's Internet Project Surveys, 2012-2014. 2014 data collected September 11-14 & September 18-21, 2014. N=1,597 internet users ages 18+.

PEW RESEARCH CENTER

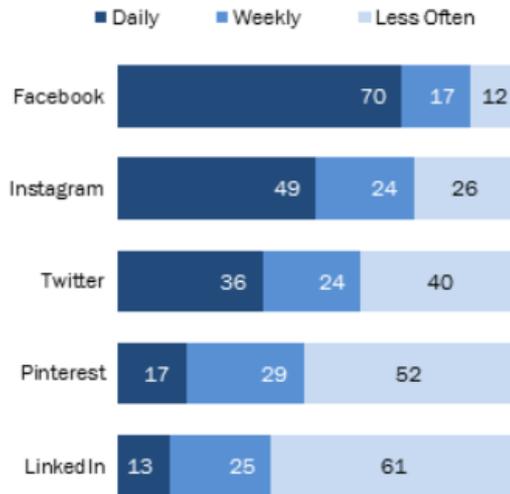
---

# Frequency of Use

---

## Frequency of social media site use

*% of social media site users who use a particular site with the following frequencies (% is reported among each specific site's user groups, e.g., 70% of Facebook users use the site on a daily basis)*



Pew Research Center's Internet Project September Combined Omnibus Survey, September 11-14 & September 18-21, 2014. N=1,597 internet users ages 18+.

PEW RESEARCH CENTER

---

# Publications Overload

- Number of Medline articles per year

- 2012: 1,039,759

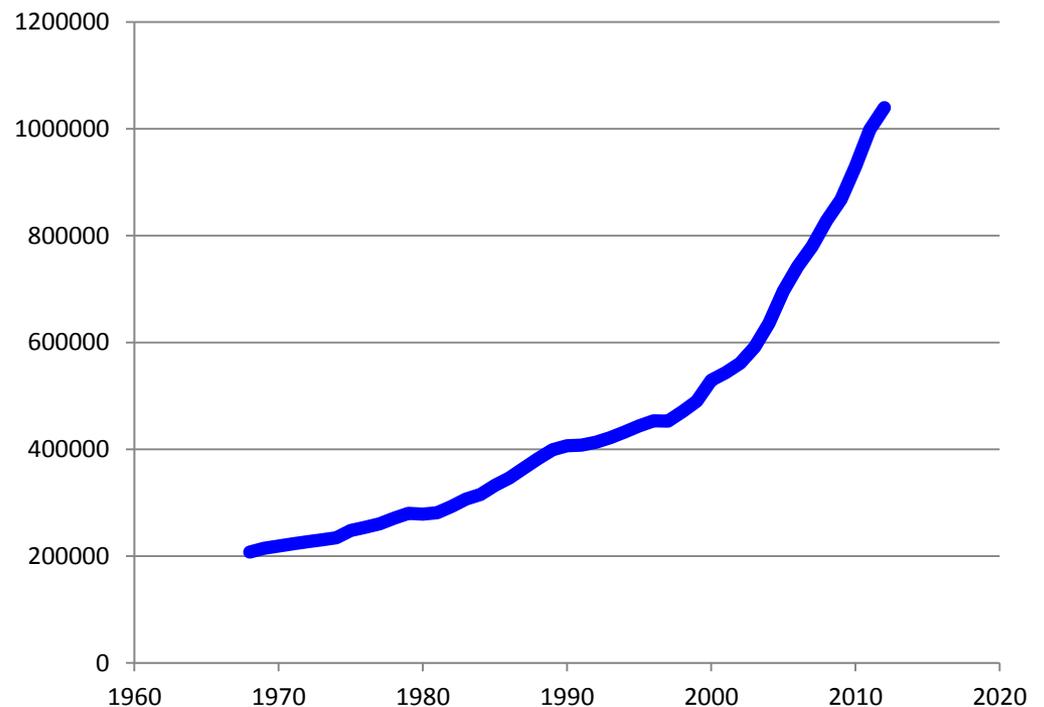
- 2010: 929,512

- **2000: 529,230**

- 1990: 406,620

- 1970: 218,875

- 1950: 82,281



Source: <http://dan.corlan.net/cgi-bin/medline-trend?Q=>

# My Journal Watch



<http://www.qfever.com/2005/10/05/the-q-fever-journalwatch/>

# Why and How I use Twitter

- Up-to-date on latest publications
  - Follow colleagues in your field (be social)
    - Post latest important articles
    - Retweet and favorite colleagues tweets
    - They will then favorite and RT your tweets
  - Twitter Journal Club “Chats”
- National/International Scientific Meetings
  - Follow hashtag
  - Examples: #IDWeek or #CROI

# Review of Twitter for Infectious Diseases Clinicians: Useful or a Waste of Time?

**Debra A. Goff,<sup>1</sup> Ravina Kullar,<sup>2</sup> and Jason G. Newland<sup>3</sup>**

<sup>1</sup>Department of Pharmacy, The Ohio State University Wexner Medical Center, Columbus; <sup>2</sup>Clinical Scientific Director, Department of Medical Affairs, Cubist Pharmaceuticals, Lexington, Massachusetts; and <sup>3</sup>Department of Pediatrics, Division of Infectious Diseases, Children's Mercy Hospital-Kansas City, University of Missouri-Kansas City, Missouri

---

**Twitter is a social networking service that has emerged as a valuable tool for healthcare professionals (HCPs). It is the only platform that allows one to connect, engage, learn, and educate oneself and others in real time on a global scale. HCPs are using social media tools to communicate, educate, and engage with their peers worldwide. Twitter allows HCPs to deliver easily accessible “real-time” clinical information on a global scale. Twitter has more than 500 million active users who generate more than 58 million tweets and 2.1 billion search queries every day. Here, we explain why Twitter is important, how and when an infectious diseases (ID) HCP should use Twitter, the impact it has in disseminating ID news, and its educational value. We also describe various tools within Twitter, such as Twitter Chat, that connect and bond HCPs on a specific topic. Twitter may help ID HCPs teach others about the global responsible use of antimicrobials in a world of escalating antimicrobial resistance.**

*Keywords.* Twitter; social media; infectious diseases; education.

---

# Twitter: How To

**Table 1. How to Get Started on Twitter**

- 1 Create a profile at [www.twitter.com](http://www.twitter.com).
- 2 Create a short user name; avoid underscores, dashes, and symbols.
- 3 Upload your photo so others can associate your name with your photo.
- 4 Write a short description of yourself. Identify yourself as a physician, pharmacist, nurse, or healthcare provider. Be creative.
- 5 Follow other healthcare providers who have interesting tweets.
- 6 Follow infectious diseases organizations.
- 7 Follow medical journals.
- 8 Send your first tweet.

# You could end up in Table 3

**Table 3. Selected People, Journals, and Infectious Diseases Organizations to Follow on Twitter**

Name	Twitter Name	Twitter Profile	Number of Followers
<i>Individuals</i>			
Tom Frieden, MD	@DrFriedenCDC	CDC director, MD, and disease detective	69.2 K
Jason Gallagher, PharmD	@JGPharmD	ID pharmacist, author of <i>Antibiotics Simplified</i>	326
Debra Goff, PharmD	@idpharmd	ID pharmacist, global antimicrobial stewardship educator	660
Marc Mendelson, MD	@SouthAfricanASP	Co-chair South African Antibiotic Stewardship Programme, president of the Federation of Infectious Diseases Societies of Southern Africa	201
Jon Otter	@jonotter	Editor of <i>Journal of Hospital Infection</i>	901
Eli Perencevich, MD	@eliowa	ID epidemiologist and health services researcher	2231
Kevin Pho, MD	@kevinmd	Social media's leading physician	115.4 K
Laura Piddock	@LauraPiddock	Professor of microbiology, director of Antibiotic Action, chair in Public Engagement for British Society for Antimicrobial Chemotherapy	2172
Didier Pittet, MD	@DidierPittet	Director of Infection Control Programme and World Health Organization external lead	1368
Daniel Uslan, MD	@dan_uslan	Director of Antimicrobial Stewardship, associate director of Clinical Epidemiology & Infection Prevention for University of California–Los Angeles Health	492

# Twitter Journal Club (or Chats)



TWEETS 1,704 FOLLOWING 224 FOLLOWERS 359 FAVORITES 1,725

## IDchat Wednesday 9pm

@IDchat1 FOLLOWS YOU

Weekly infectious disease #IDchat, Wednesdays 9-10 pm EST.

Tweet to

Message

43 Followers you know



Tweets Tweets & replies Photos & videos

IDchat Wednesday 9pm retweeted



**Michael Saag** @msaagmd · Jan 23

Interesting panel discussion Feb 9 on mobile app use by HIV programs thru CFAR Behavioral & Community Science Core [bit.ly/1EBkr9q](http://bit.ly/1EBkr9q)

3 3

IDchat Wednesday 9pm retweeted



**Philip Lederer MD** @philiplederer · Dec 26

"PICC, has a perceived lower complication rate than the traditional central line, and it allows patients to m... [amzn.com/k/Zud3ucnwRxmW...](http://amzn.com/k/Zud3ucnwRxmW...)

3 1

# Scientific Meetings



**Steven Asch**

@steveaschmd FOLLOWS YOU

Professor of Medicine at Stanford and VA. Research in how to improve delivery of high value #healthcare for all. Views my own. #implementation #primarycare

San Francisco Bay Area

Tweet to

Message

9 Followers you know



42 Photos and videos

TWEETS **307** FOLLOWING **193** FOLLOWERS **273** FAVORITES **119**

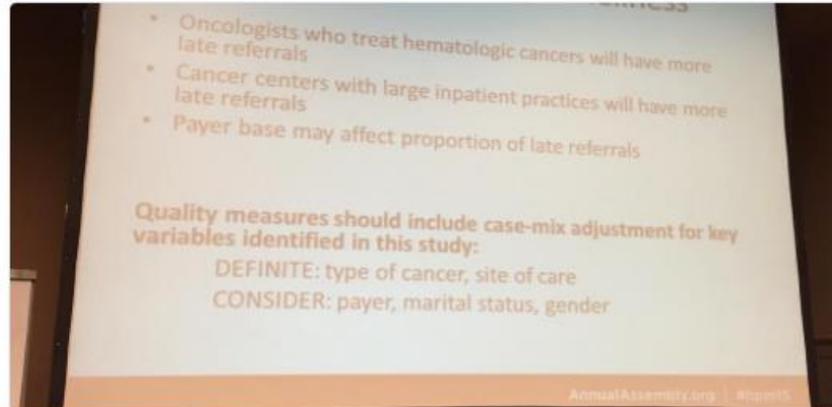


Following

Tweets Tweets & replies Photos & videos

**Steven Asch** @steveaschmd · 5m

We need to monitor who gets timely hospice referral, but let's account for things beyond providers control #hpm15



3 1

[View more photos and videos](#)

Who to follow · Refresh · View all



**ObermannCenter** @Oberm...

Follow



**Javier Casas Ciria** @ciento...

Followed by Jayant Kalpoe ...

Follow



**Michael Bazaco** @MCBaza...

Followed by Michael Batz a...

Follow

Popular accounts · Find friends

Trends · Change

Ceres  
#CPAC2015  
#ntsummit  
#PHASummit  
#MakeASongBritish  
Josh Hamilton  
Jihadi John

# Market Your Science

- Old World: publication in journals, national meetings
  - 800,000 papers / year
  - 1 paper of 0.000125% of all papers in a year
  - 2,192 papers / day
  - 1 paper is 0.05% of all papers each day
- New World: blogs, social media, network with science journalists to leverage traditional media outlets

# “Controversies” Blog story

- Started in 2009 (Very slowly)
- Founder in Iowa, others in Maryland and Virginia
  - Now all in Iowa! (recruitment tool?)
- Keys
  - Focused topic
  - Recognized experts
  - Not alone – need to frequently blog to maintain audience
  - Tenured Professors
  - Never (Rarely) discuss home institution

# Can you change public policy?

Kwon et al. *Antimicrobial Resistance and Infection Control* 2012, 1:5  
<http://www.aricjournal.com/1/1/5>



RESEARCH

Open Access

## National Institute of Allergy and Infectious Disease (NIAID) Funding for Studies of Hospital-Associated Bacterial Pathogens: Are Funds Proportionate to Burden of Disease?

Seunghyug Kwon<sup>1,2</sup>, Marin L Schweizer<sup>1,2,3</sup> and Eli N Perencevich<sup>1,2,3\*</sup>

### Abstract

**Background:** Hospital-associated infections (HAIs) are associated with a considerable burden of disease and direct costs greater than \$17 billion. The pathogens that cause the majority of serious HAIs are *Enterococcus faecium*, *Staphylococcus aureus*, *Clostridium difficile*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter* species, referred as ESCKAPE. We aimed to determine the amount of funding the National Institute of Health (NIH) National Institute of Allergy and Infectious Diseases (NIAID) allocates to research on antimicrobial resistant pathogens, particularly ESCKAPE pathogens.

**Methods:** The NIH Research Portfolio Online Reporting Tools (RePORT) database was used to identify NIAID antimicrobial resistance research grants funded in 2007-2009 using the terms "antibiotic resistance," "antimicrobial resistance," and "hospital-associated infection."

# ...not unless people read it

WIRED SCIENCE BLOGS /

## SUPERBUG

### How Much Is a Drug-Resistance Death Worth? Less Than \$600

BY MARYN MCKENNA 07.05.11 | 8:00 AM | PERMALINK



So, antibiotic resistance: We care about it, right? The [World Health Organization](#) does: It made antimicrobial resistance the theme of this year's World Health Day. The [Centers for Disease Control and Prevention](#) does. The journal *Lancet Infectious Diseases* says it's a "global health concern." The major association for infectious disease physicians has [pleaded for attention](#). Two separate sets of legislators have introduced [two bills](#) in Congress.

AdChoices

intel REALSENSE TECHNOLOGY

This is where it all changes.

Learn more >

#### About Maryn McKenna



Maryn McKenna is a journalist for [national magazines](#) and a Senior Fellow of the Schuster Institute at Brandeis University. She is the author of [SUPERBUG](#) and [BEATING BACK THE DEVIL](#), and is writing a book about food for National Geographic.

Subscribe

#### Wired Science Blogs

Our network of all-star science bloggers.



**Beyond Apollo**  
David S. F. Portree



**Brain Watch**  
Christian Jarrett



**Charismatic Minifauna**  
Gwen Pearson



**Dot Physics**  
Rhett Allain

# ...and they did

Research

Highly accessed

Open Access

## National Institute of Allergy and Infectious Disease (NIAID) Funding for Studies of Hospital-Associated Bacterial Pathogens: Are Funds Proportionate to Burden of Disease?

Seunghyug Kwon, Marin L Schweizer and Eli N Perencevich\*

\* Corresponding author: Eli N Perencevich [eli-perencevich@uiowa.edu](mailto:eli-perencevich@uiowa.edu)

*Antimicrobial Resistance and Infection Control* 2012, **1**:5

doi:10.1186/2047-2994-1-5

### Article Metrics



8047

Total accesses



Altmetric score  
from [Altmetric.com](http://Altmetric.com)

[Article metric FAQ](#)

# ...and policy is changing

## The White House 2016 Budget Includes Big Funding for Antibiotic Resistance

BY MARYN MCKENNA 01.31.15 | 8:40 AM | PERMALINK

[f Share](#) 8 [t Tweet](#) 472 [g+1](#) 8 [in Share](#) 59 [Pin it](#)



[Roman Boed \(CC\), Flickr](#)

# Influencing National Debate

## Controversies in Hospital Infection Prevention

Wherein we ponder vexing issues in infection prevention and control, inside and outside the hospital.

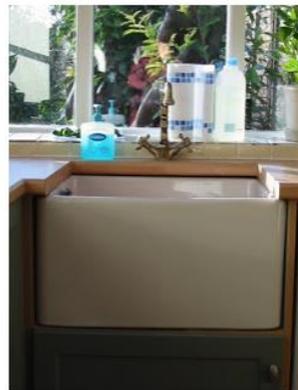
Thursday, August 23, 2012

### Not a failure, a lesson. The NIH KPC Outbreak

Mike posted about this yesterday and I'm sure we'll have more posts concerning the deadly KPC outbreak that occurred last year at the NIH Clinical Center. Since the whole report is behind a paywall (why is that??), I thought I'd describe the interventions taken to control the outbreak and also let you peruse the description of the 18 cases and 11 deaths (See table below).

Infection control measures used:

- 1) Index patient placed on enhanced contact isolation on admission.
- 2) All ICU patients during the outbreak were placed on universal enhanced contact precautions during their entire stay
- 3) A wall was built in the ICU, so that all KPC+ patients could be placed in a new six-bed unit
- 4) Infection control compliance monitors were hired (peak use was 9 monitors) who ensured that all healthcare workers entering the rooms practiced enhanced contact precautions and hand hygiene. Suboptimal monitors were fired
- 5) A private firm was hired to decontaminate the ICU and all KPC+ patient rooms using hydrogen peroxide vapor
- 6) Staff were cohorted so that staff did not care for both KPC+ and KPC negative patients
- 7) When the KPC was found in a sink, they tore out the plumbing
- 8) Active surveillance culturing using rectal and throat swabs was utilized



The kitchen sink: the problem and the current solution

What an amazing effort by Tara Palmore and others at NIH. Why did it take so long to control the outbreak? It's not their fault. I was in a similar situation with an acinetobacter outbreak in 2002. What I faced in 2002 and what Dr. Palmore faced last year is that there is almost no science behind infection prevention interventions. We literally don't know what works or where in works. What this outbreak demonstrates is what happens when you make little investment in infection control science in decades. We don't know how to prevent these outbreaks, so we throw the kitchen sink (literally in this case) at them hoping something works

### The Bloggers



Dan Diekema



Mike Edmond



Eli Perencevich - @eliowa



# By “Talk”ing to “The Nation”

news ▶ health ▶ health care

## Hospitals Fight To Stop Superbugs' Spread

September 18, 2012 1:00 PM



**Listen to the Story**  
Talk of the Nation



30 min 19 sec

+ Playlist  
↓ Download

### Guests

**Maryn McKenna**, author, *Superbug: The Fatal Menace Of MRSA*

**Dr. Eli Perencevich**, professor, University of Iowa Carver College of Medicine

**Dr. Deverick Anderson**, co-director, Duke Infection Control Outreach Network

The so-called "NIH superbug", a *Klebsiella pneumoniae* that resists most antibiotics, recently killed a seventh patient at the National Institutes of Health Clinical Center in Maryland. Similar outbreaks of health care-associated infections spread in hospitals across the country every day.

<http://www.npr.org/2012/09/18/161355297/hospitals-fight-to-stop-superbugs-spread>

# New Colleagues and Collaborators



TWEETS **5,776** FOLLOWING **199** FOLLOWERS **2,559** FAVORITES **12.5K**

**Mary Dixon-Woods**  
@MaryDixonWoods FOLLOWS YOU

Medical sociologist, Wellcome Trust Investigator, Deputy Editor  
[@BMJ\\_Qual\\_Saf](#), FAcSS. Interests: patient safety, quality of care, ethics, & methods. Views: own.

[@uniofleicester](#); [@dartinstitute](#)  
[www2.le.ac.uk/departments/he...](http://www2.le.ac.uk/departments/he...)  
Joined September 2012

[Tweet to](#) [Message](#)

**Tweets** Tweets & replies Photos & videos

Mary Dixon-Woods retweeted  
**Paul Glasziou** @PaulGlasziou · 48m  
Abstracts for 3rd PreventingOverdiagnosis close 31 March (Washington, 1-3 September) [preventingoverdiagnosis.net](http://preventingoverdiagnosis.net)  
4 1

Mary Dixon-Woods retweeted  
**Claire Kilpatrick** @claireekt · 2h  
Interesting edition of [@AJICJournal](#) this month inc [@sanjaysaint](#) work on 'No Preventable Harms' campaign #CAUTI [tinyurl.com/In5o2zp](http://tinyurl.com/In5o2zp)  
1 1

# New Publications

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY JUNE 2013, VOL. 34, NO. 6

COMMENTARY

## When Counting Central Line Infections Counts

Mary Dixon-Woods, MSc, DPhil;<sup>1</sup> Eli N. Perencevich, MD, MS<sup>2</sup>

---

(See the article by Wise et al, on pages 547–554.)

In this issue of the journal, Wise et al<sup>1</sup> report encouraging news of significant declines in reported rates of central venous catheter (CVC) bloodstream infections (BSIs) in critical care units over the past 2 decades. Using data from the US Centers

variability in how definitions of central line infections are applied and interpreted. One study, using 2004–2007 data from 20 ICUs at 4 large academic medical centers, found limited correlation between CVC BSI rates determined by

# What about the VA?

The Opinion Pages

## Opinionator

FIXES

### For V.A. Hospitals (and Patients), a Major Health Victory

By TINA ROSENBERG JANUARY 30, 2015 3:30 AM 32 Comments



Fixes looks at solutions to social problems and why they work.

Email

Share

Tweet

Save



Hiroko Masuike/The New York Times

PREVIOUS POST  
◀ Civil War Submarines

NEXT POST  
Was Abolitionism a Failure? ▶

*Fixes explores solutions to major social problems. Each week, it examines creative initiatives that can tell us about the difference between success and failure. It is written by David Bornstein, author of "How to Change the World," and co-founder of the Solutions Journalism Network, and Tina Rosenberg, contributing writer for The New York Times magazine and author of "Join the Club: How Peer Pressure Can Transform the World." Readers with ideas for future columns can write to the authors at [fixes@nytimes.com](mailto:fixes@nytimes.com). To receive e-mail alerts for Fixes columns, sign up at [solutionsjournalism.org](http://solutionsjournalism.org) » [Join Fixes on Facebook](#) »*

#### INSIDE OPINIONATOR

 PRIVATE LIVES

February 26, 2015

#### A Mission of Mercy

This immigrant mother had to make a wrenching choice about her desperately ill newborn. [Read more...](#)

 THE END

 COUCH

February 19, 2015

# We can share our perspective

The V.A.'s achievement is even more remarkable because its patients are older and sicker than patients in other hospitals. (Most patients are Vietnam-era vets. None are healthy young women giving birth, a large patient group in most hospitals.) They are twice as likely to come to the hospital already testing positive for MRSA. The greater the percentage of people who have the bacteria, the harder it is to control its spread. Because their immune systems are weaker, V.A. patients are also more likely to go from testing positive to full infection.

# And we get recognized internally



The image is a screenshot of the United States Department of Veterans Affairs Intranet. At the top, there is a header with the VA seal and the text 'UNITED STATES DEPARTMENT OF VETERANS AFFAIRS INTRANET'. Below this is a navigation bar with links for 'VA Intranet Home', 'About VA', 'Organizations', 'Find a Facility', and 'Employee Resources'. A search box is also present. On the left side, there is a vertical menu with links for 'VACO Daily News', 'VACO Jobs Today', and 'OIG Career Opportunities'. The main content area features a red banner with the text 'VACO DAILY NEWS'. Below this, there is a large heading 'Hey VA!' and a 'Terror Alert Level' indicator. A red box contains the text 'Message for 2/26/2015' and a dropdown menu for 'Select Another Day to View' with a 'View New Date' button. The main text of the message reads: 'HEY VA! HAVE YOU HEARD? VA's success in reducing hospital associated infections (HAIs) was recently featured in the New York Times. HAIs are a major threat to patient safety, and in comparison to non-VA hospitals, VA is making great strides in reducing one of the most significant causes of HAIs: methicillin-resistant Staphylococcus aureus or MRSA. VA's comprehensive MRSA prevention plan, initiated in 2007, was highlighted by the Times. Also included in the article was commentary from VA HSR&D investigator Eli Perencevich, M.D., M.S., Director of the HSR&D Center for Comprehensive Access & Delivery Research and Evaluation (CADRE, <http://www.hsrd.research.va.gov/centers/cadre.cfm>) in Iowa City. To learn more, visit the VA HSR&D website at [http://www.hsrd.research.va.gov/news/research\\_news/mrsa-020515.cfm](http://www.hsrd.research.va.gov/news/research_news/mrsa-020515.cfm).

# Final thoughts

- Should I blog?
  - If you are passionate about a topic and have co-bloggers that share the same passion – Blog
  - Don't do it alone
- Twitter?
  - Highly recommend
  - Time limited
  - Can consume without producing
- THANKS!

# A Press Release Is Not Enough:

## How You Can Help Bridge the Research-Policy Communication Gap

*Part II: Q and A*

Austin Frakt, PhD



School of Medicine  
School of Public Health

[TheIncidentalEconomist.com](http://TheIncidentalEconomist.com)

*A focus on research, an eye on reform.*

# What I did last time

(look here: <http://tinyurl.com/lft4bgm>)

1. Do we have a communication problem?

*Yes, we do.*

2. What can we do about it?

*Supplement traditional dissemination with social media.*

3. Austin, do your crazy ideas really work?

*Yes. Would I be talking about them if I thought otherwise?*

4. Is it right for me?

*It depends.*

5. How can I get started?

*Try Twitter, email journalists, be a resource.*

# Poll Question

What percent of studies in health care receive any mention in the media?

1. 0.04%
2. 0.4%
3. 4%

# **This time: Your questions & requests**

1. VA's social media policy
2. Tips for relating to journalists
3. Avoiding being misinterpreted
4. More about Twitter
5. More about a social media strategy

# 1. What's VA's social media policy?

- Look here: [vaww.va.gov/webcom/socialmedia.asp](http://vaww.va.gov/webcom/socialmedia.asp)
- There are official VA blogs and social media accounts. That's not what we're talking about.
- For personal sites/accounts: "VA employees must draw a clear distinction between their personal views and their professional duties. Employees who are not officially authorized to speak on behalf of VA must never state or [imply] their communications represent VA's official position." [[Source](#)]

## 2. How do I cultivate relationships with journalists?

- Start with a few, and maybe not “big” ones
- Go where they are: Twitter
- Be helpful
  - Anticipate needs
  - Provide missing pieces, compelling results, charts
- Send brief emails
- This is not a trivial investment/don't give up

### **3. How do I avoid being misinterpreted?**

- Let's distinguish between honest and willful misunderstanding
- Take charge
- Take responsibility
- Write your talking points in advance
- Provide more detail/corrections on your blog (or Twitter)

## 4. Tell me more about Twitter

- This is vague. Try it! (There will be an adjustment period.)
- There are many “how to” guides. Here’s one: [momthisishowtwitterworks.com](http://momthisishowtwitterworks.com)
- You only see tweets of those you follow
- Google “[name] Twitter” (or search within Twitter) to find your favorite journalists, researchers, etc.

## 5. What does a social media strategy look like?

- More art than science. There's no one right way.
- If you *really* want to write, engage, be helpful, you'll find a way to get your message through
- First rule: If what you're doing doesn't work, try something else, or another time
- Seek feedback from those who are successful
- Consider what you like about styles you find engaging

# Question Of The Day

---

What should cost less: a  
gallon of gas or a gallon of milk?

**YES**  
**43%**



**NO**  
**57%**



# Questions? Comments?

Austin

Email: [Austin.Frakt@va.gov](mailto:Austin.Frakt@va.gov)

Twitter: [@afrakt](https://twitter.com/afrakt)

My blog: [TheIncidentalEconomist.com](http://TheIncidentalEconomist.com)

Eli

Email: [eli.perencevich@va.gov](mailto:eli.perencevich@va.gov)

Twitter: [@eliowa](https://twitter.com/eliowa)