“Nightmare” in Healthcare
Using Vital signs to Reach
Clinicians and Patients

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Background: What are Healthcare-associated Infections?

- Infections that happen when you are being treated for something else
- Inpatient
- Outpatient
- Antibiotic resistance
- Enterobacteriaceae
  - One family (>100) bacteria that causes HAIs
    - Includes *E. coli*
    - CRE – carbapenem-resistant Enterobacteriaceae
HAI Communication Landscape

- **HAI s generate significant press**
  - Shift to regional or local focus

- **Wide and varied audiences**
  - Need for reaching a broad healthcare team

- **The science is complex**
  - Topics are difficult for consumers to grasp

- **Numerous prevention recommendations**
  - No single behavior can prevent all HAI threats

- **Need for strong risk communications**
  - Patients experience variety of feelings: fear, loss of trust, lack of control
Objectives for HAI Communications

- Increase patients’ and caregivers’ awareness of healthcare-associated infections
- Educate and motivate healthcare providers and administrators about best practices to prevent HAIs in all healthcare settings
- Improve transparency and accountability around reporting of medical errors
- Drive action in response to a healthcare or public health threat
2013 Vital Signs - CRE

- **What is Vital Signs?**
  - Monthly CDC publication
  - Science + Communications + Policy = Impact
  - MMWR article is the scientific foundation
  - 30+ communications products – plain language
    - Four-page fact sheet is the comm foundation
    - Traditional/social media, online collateral
    - Partnership, education materials

- **Why CRE?**
  - Triple threat
    - Resistant to nearly all or all antibiotics
    - High mortality rate (up to 50% for bloodstream infections)
    - Ability to give its resistance weapons to other bacteria
  - We know how to prevent
  - Action needed now before window of opportunity is lost
The Vital Signs Process

- Data
- Key messages
- Scientific article
- Fact sheet
  - Science + communication
  - Focus on action
  - Draft, plain language negotiation, graphics
    - CRE complexity = big challenge

- Supporting materials
- Launch/outreach
- Follow up
- Evaluation
Key Audiences

- Healthcare providers
  - Physicians
  - Nurses
  - Technicians

- Healthcare facility leaders
  - CEOs
  - Chief medical officers

- Secondary audiences
  - State health departments
  - Patient advocacy organizations
  - Patients and family/caregivers
  - Industry
Key Messages

- **Triple threat**
  - Resistance/few options
  - Death
  - Spread of resistance weapons

- **Urgent, “Nightmare” scenario**
  - Understanding the weight of the message and the sender

- **Detect and Protect: we know how to prevent**
  - Promote CRE prevention toolkit

- **Healthcare providers and leaders must act now**
Advance Work = The Key to Success

- **Partnerships**
  - Months ahead: heads up
  - Advance “blind” key messages and tools to link to/promote
  - Spokesperson identification
  - Cross-agency work
    - CMS/CDC open letter to healthcare facilities

- **Media**
  - Courtesy heads up to established reporters
  - Advance interviews (published but pre-embargo)
  - Multimedia production

- **Success stories**
  - State-based case studies about effective CRE outbreak control

- **Clinician education**
  - Medscape slide show

- **Web refresh**
Pressing “Go”

- **Press release and telebriefing**
  - Spokespeople/messaging are critical
    - CDC Director Dr. Tom Frieden and a DHQP expert Dr. Arjun Srinivasan

- **Web launch**
  - Fact sheet, features, Google Ads

- **Digital press kit**
  - Multimedia foundational pieces used by many outlets
  - Convenience

- **Hill alert**

- **Social media (Facebook, Twitter)**

- **Safe Healthcare Blog posts**

- **Partner messages**
  - CMS-certified facilities
  - Health departments
  - Infectious disease/antibiotic resistance organizations
  - Patient advocacy groups
Making Health Care Safer
Stop Infections from Lethal CRE Germs Now

4% & 18%
About 4% of US hospitals had at least one patient with a CRE (carbapenem-resistant Enterobacteriaceae) infection during the first half of 2012. About 18% of long-term acute care hospitals* had one.

1 in 2
CRE germs kill up to half of patients who get bloodstream infections from them.

*Long-term acute care hospitals provide complex medical care to adults and frail elderly, for long periods of time.

Source: CDC Vital Signs, March 2013 | www.cdc.gov/vitalsigns

New CDC Vital Signs: Lethal, Drug-resistant Bacteria Spreading in U.S. Healthcare Facilities
Drug-resistant germs called carbapenem-resistant Enterobacteriaceae, or CRE, are on the rise and have become more resistant to last-resort antibiotics during the past decade, according to a new CDC Vital Signs report. These bacteria are causing more hospitalized patients to get infections that, in some cases, are impossible to treat.

CRE are lethal bacteria that pose a triple threat:
- **Resistance**: CRE are resistant to all, or nearly all, the antibiotics we have - even our most powerful drugs of last-resort.
- **Death**: CRE have high mortality rates - CRE germs kill 1 in 2 patients who get bloodstream infections from them.
- **Spread of disease**: CRE easily transfer their antibiotic resistance to other bacteria. For example, carbapenem-resistant Klebsiella could spread its drug-destroying weapons to a normal E. coli bacteria, which makes the E. coli resistant to antibiotics also. That could create a nightmare scenario since E. coli is the most common cause of urinary tract infections in healthy people.

Currently, almost all CRE infections occur in people receiving significant medical care. CRE are usually transmitted from person-to-person, often on the hands of health care workers. In 2013, CDC released a concise, practical CRE prevention toolkit with in-depth recommendations to control CRE transmission in hospitals, long-term acute care facilities, and nursing homes. Recommendations for health departments are also included. CRE can be carried by patients from one health care setting to another, therefore, facilities are encouraged to work together, using a regional “Detect and Protect” approach, to implement CRE prevention programs.

CRE GERMS KILL UP TO HALF OF PATIENTS WHO GET BLOODSTREAM INFECTIONS FROM THEM.

Vitalsigns™
www.cdc.gov/vitalsigns
Partner Distribution
Clinician Highlights

**Modern Physician**

*Daily news for physician executives, leaders and entrepreneurs*

**Business of Medicine MBA**

*Online + one weekend per month. Be a physician leader who turns change into oppo*

**TODAY’S PHYSICIAN EXECUTIVE NEWS HEADLINES**

» CDC urges action against deadly superbug

» Checklists can improve patient safety

» Docs who use social media 

**KEVINMD.com**

**AHIP Solutions SmartBrief**

*News for the health insurance industry*

**CDC warns of deadly, antibiotic-resistant bacteria**

CDC data show that in the first half of 2012, 4% of U.S. hospitals and 18% of nursing homes had at least one case of carbapenem-resistant Enterobacteriaceae, a deadly bacteria resistant to even the strongest antibiotics. The CDC urged facilities to stop the spread of the bacteria by enforcing infection control policies, grouping CRE patients together, isolating hospitals when these patients are transferred, and instructing patients to always take all antibiotics as prescribed.

**Antibiotics for Carbapenem-Resistant Enterobacteriaceae: The End Is Near**

Arjun Srinivasan, MD Contributing Information
March 5, 2013

CDC’s Kitty Anderson holds up a 96-well plate to test the ability of bacteria to grow in the presence of antibiotics.
30-Day Metrics - Media

- Reach = 1,377,512,306
- Estimated publicity value = $1,000,755
- Online news led – 800 hits
  - 122 daily papers
  - 3 network shows
  - 37 syndicates
- Outlets with most reach
  - Yahoo! News
  - Daily Mail
  - USA Today
  - CNN
  - WebMD
  - Fox News
  - Examiner
  - Reuters
  - Washington Post
  - NPR
Metrics – Web

Top Vital Signs Traffic to Date

CDC Web Metrics – Making Healthcare Safer
Date Range: March 5—April 1, 2013

Cumulative Monthly Vital Signs Traffic
Radian 6 Metrics - Making Healthcare Safer
Timeframe Analyzed: March 5—April 1, 2013

Metrics of Posts on Facebook and Twitter
16,339 posts referenced CDC VITAL SIGNS during this timeframe through posts, comments, shares, tweets or mentions.
Out of the total posts:
- 2,364 Retweets (RT) 16.1%
- 13,705 Mentions (MT) 83.8%

Mentions include posts from Facebook, Twitter, Blogs and Mainstream News.

Potential Reach: 48,173,608
Reach is the number of people who were potentially exposed to CDC VITAL SIGNS twitter content. This is based on the followers of those that shared content. This does count people more than once if they receive more than one tweet.

Share of Conversation on Social Media Channels

- The conversation peaked on March 5, 2013 (the same day as Vital Signs for this topic)
- 6,722 posts were observed during this peak

Top Influencers (ranked by no. of followers)

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<tr>
<th>INFLUENCER</th>
<th>Hashtag</th>
<th>Followers</th>
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<td>CNN</td>
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<td>REALTONEYROCHA</td>
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<td>3.</td>
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Engaging States to Detect and Protect

- Highlighting state efforts in fact sheet
  - Colorado Department of Public Health and Environment
  - Florida Department of Health
- Public Health Stories from the field
  - Colorado
  - Oregon
- Town Hall meeting
  - Record attendance
  - 94% of states participated in the call
  - Numerous hospitals
Antibiotic resistance: The last resort

Health officials are watching in horror as bacteria become resistant to powerful carbapenem antibiotics — one of the last drugs on the shelf.

Maryn McKenna
24 July 2013
Lessons Learned

- Advance work lays the foundation for success
- Partnerships are key
- Be strategic and direct with messaging
- Don’t be afraid
  - Think big
  - Challenge routine
  - Overcome complexity
Thank you! &
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- DHQP scientific staff
- DHQP communications team
- Partners