Public Reporting of Healthcare Associated Infections & Multi-Resistant Drug Organisms

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Health Watch USA sm
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This presentation is the express opinion of Kevin T. Kavanagh

Size of the Problem of Healthcare Associated Infections (HAIs)

Most Healthcare Associated Infections are Multi-Resistant Drug Organisms

- Affects 1 in 20 Hospitalized Patients
- Top 10 Cause of Death in the United States
  http://www.ahrq.gov/news/newsletters/research-activities/aug11/0811RA3.html

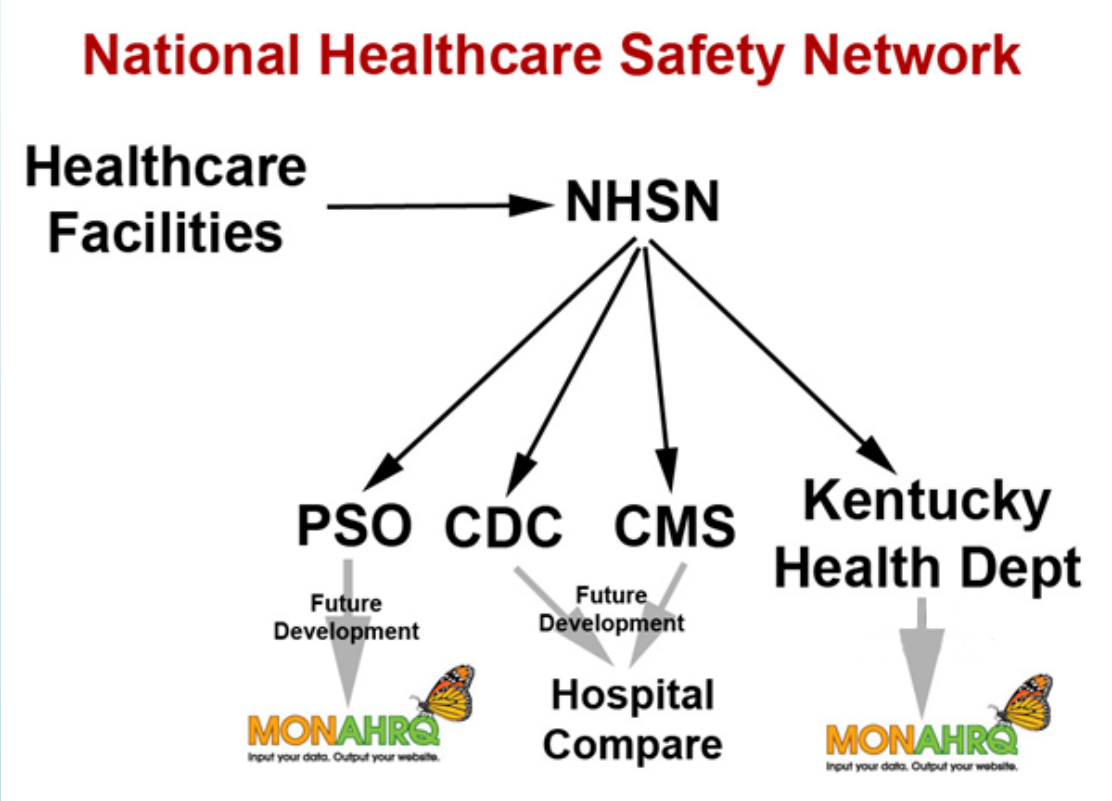
Nationally, deaths from HAIs equal more than one Boeing 767 crashing every day.

Size of the Problem of Healthcare Associated Infections

- In the USA -- HAIs cost 30 Billion Dollars Annually
- In Kentucky - - An annual cost of almost 400 million dollars & almost 1400 lives lost from 23,000 HAIs.

The Bill Does Not Produce Duplicate Work.

- Designed to use the same federal reporting system the NHSN (National Healthcare Safety Network)



What the Federal Government Requires

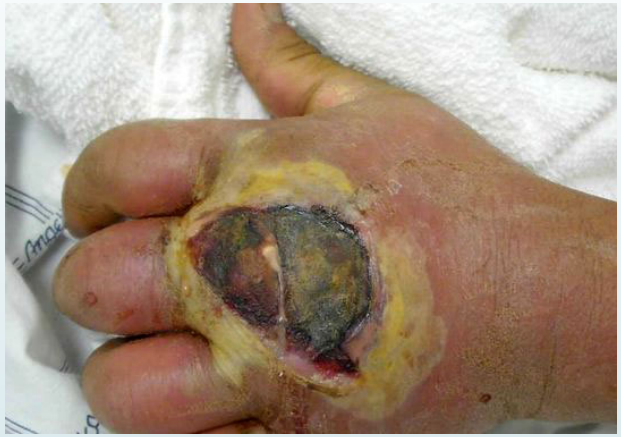
Healthcare Facility HAI Reporting to CMS via NHSN – Current and Proposed Requirements
DRAFT (8/5/2011)

HAI Event	Facility Type	Reporting Start Date
CLABSI	Acute Care Hospitals Adult, Pediatric, and Neonatal ICUs	January 2011
CAUTI	Acute Care Hospitals Adult and Pediatric ICUs	January 2012
SSI	Acute Care Hospitals Colon and abdominal hysterectomy	January 2012
I.V. antimicrobial start *(proposed)*	Dialysis Facilities	January 2012
Positive blood culture *(proposed)*	Dialysis Facilities	January 2012
Signs of vascular access infection *(proposed)*	Dialysis Facilities	January 2012
CLABSI	Long Term Care Hospitals *	October 2012
CAUTI	Long Term Care Hospitals *	October 2012
CAUTI	Inpatient Rehabilitation Facilities	October 2012
MRSA Bacteremia	Acute Care Hospitals	January 2013
C. difficile LabID Event	Acute Care Hospitals	January 2013
HCW Influenza Vaccination	Acute Care Hospitals	January 2013
HCW Influenza Vaccination	OP Surgery, ASCs	October 2013
SSI *(proposed)*	Outpatient Surgery/ASCs	January 2014

* Long Term Care Hospitals are called **Long Term Acute Care Hospitals** in NHSN

Only a Few Measurements and Some are Incomplete

- MRSA is reported for bloodstream infections (lab event).
  -- The picture to the right would not be reportable.



- CLABSI only in ICUs
- CRE, the virtually untreatable bacteria is not mandated.

Facilities in Kentucky – Few Have to Report Under Federal Requirements

Type of Facility	Number in Kentucky
Long Term Care Facilities	307
Hospitals (Not Critical Access)	94
Critical Access Hospitals	29
Surgery Centers	31
Dialysis Centers	57

The Bill Requires All Facilities to Report

- Nursing Homes, Critical Access Hospitals and Surgery Centers. Acute care facilities comprise less than 20% of the facilities in Kentucky.

- It gets away from using the poorly defined “outbreak” as a means to determine what is reported.

We Are Missing Our Targets

Table 1: Summary of Progress Toward the National Targets for Elimination of Health Care-Associated Infections

Metric	Source	National 5-year Prevention Target	On Track to Meet 2013 Targets?
Bloodstream infections	NHSN	50% reduction	Yes
Clostridium difficile (hospitalizations)	HCUP	30% reduction	No
Clostridium difficile infections	NHSN	30% reduction	No
Urinary tract infections	NHSN	25% reduction	No
MRSA invasive infections (population)	EIP	50% reduction	Yes
MRSA bacteremia (hospital)	NHSN	25% reduction	No
Surgical site infections	NHSN	25% reduction	Yes
Surgical Care Improvement Project Measures	SCIP	95% adherence	Retired

* 2010 - 2011 is the baseline period.
EIP is the CDC's Emerging Infections Program; HCUP is AHRQ's Healthcare Cost and Utilization Project; NHSN is the CDC's National Healthcare Safety Network; SCIP is Surgical Care Improvement project.

http://www.health.gov/hai/prevent_hai.asp#hai_measures

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What Other States Have Done

- 31 States plus DC have mandatory public reporting laws.
- 10 States require reporting of MRSA
- 7 States require MRSA Screening.
- 17 States have CRE mandatory reporting laws.

Reports from 31 States Can Be Downloaded From:
http://safepatientproject.org/tags/state-disclosure-reports

Central Line Blood Stream Infections in Kentucky

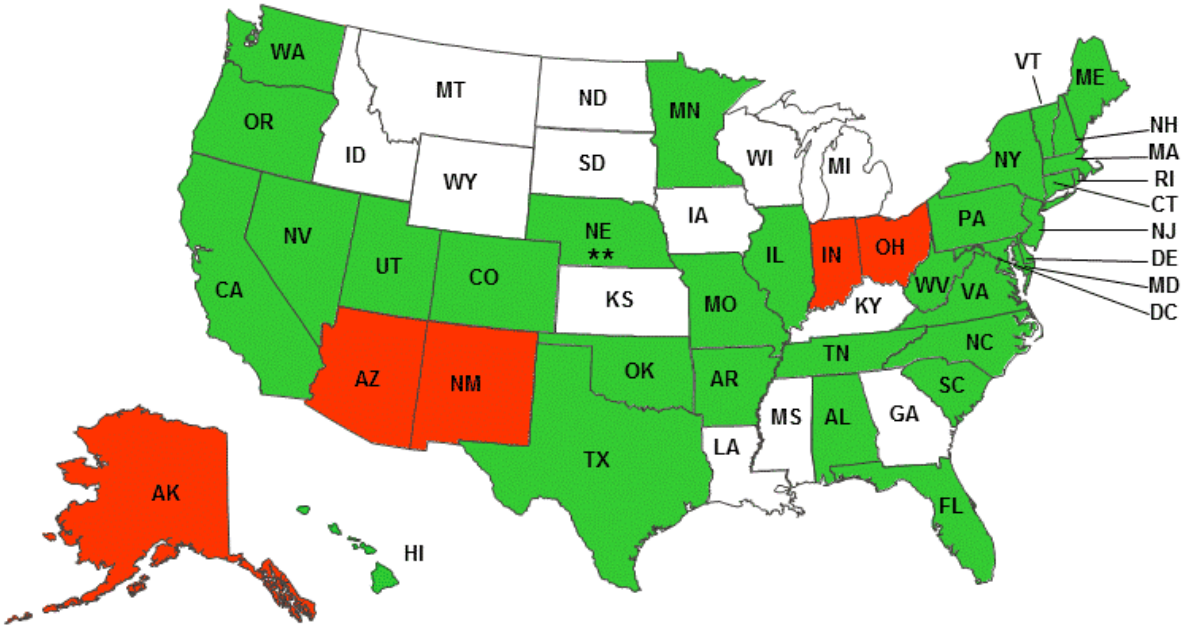
SIR: Standardized Infection Ratio

- The National Average SIR in 2013 (4/1/2012 to 3/31/2013) was: 0.57
- The Kentucky Average SIR in 2010 (1/1/2011-12/31/2011) was 0.71
- The Kentucky Average SIR in 2013 (4/1/2012 to 3/31/2013) was: 0.71
- The SIR for the University of Kentucky Dropped from
  1.02 (Year Ending 6/30/2012) to
  0.598 (Year Ending 3/31/2013)

KY Cabinet for Health & Family Services. Currently, 55 Kentucky units, representing 33 hospitals, participate in On The CUSP: Stop BSI.

AHRQ - KY Participation in the KUSP Program as of June 15, 2011 was just 31.2%
http://www.ahrq.gov/professionals/quality-patient-safety/cusp/onthecusprpt/onthecusp.pdf

State HAI Reporting Laws

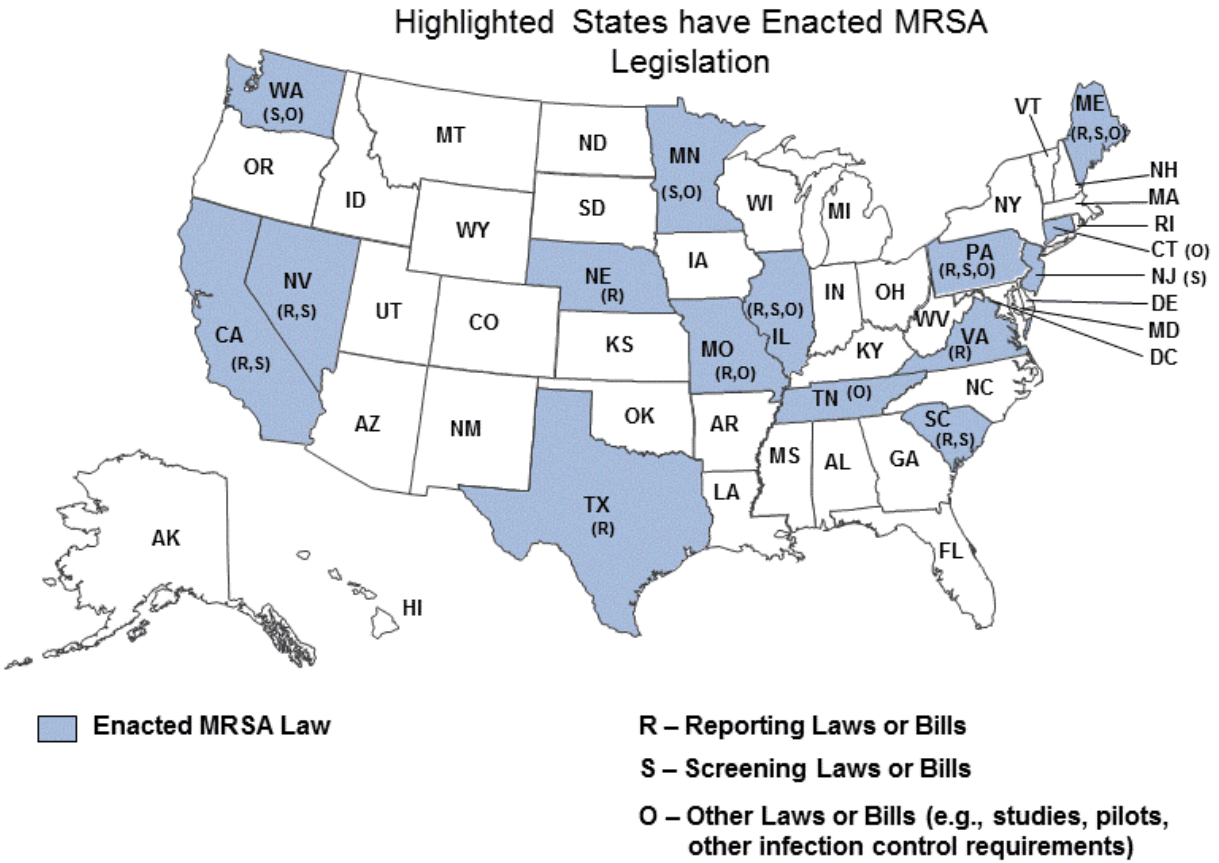


States with study laws

Mandates public reporting of infection rates

** Voluntary

MRSA Laws



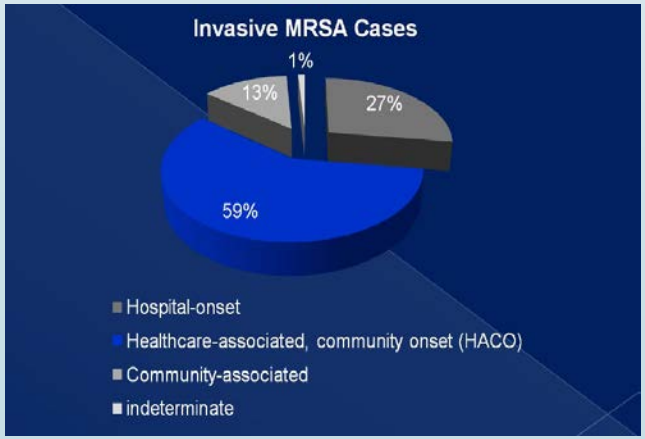
MRSA Control – Not on track by most measurements.

- 10 States require MRSA Public Reporting
- Seven States have Screening Laws

Data conflicting on meeting goals – No Uniform Reporting Systems:

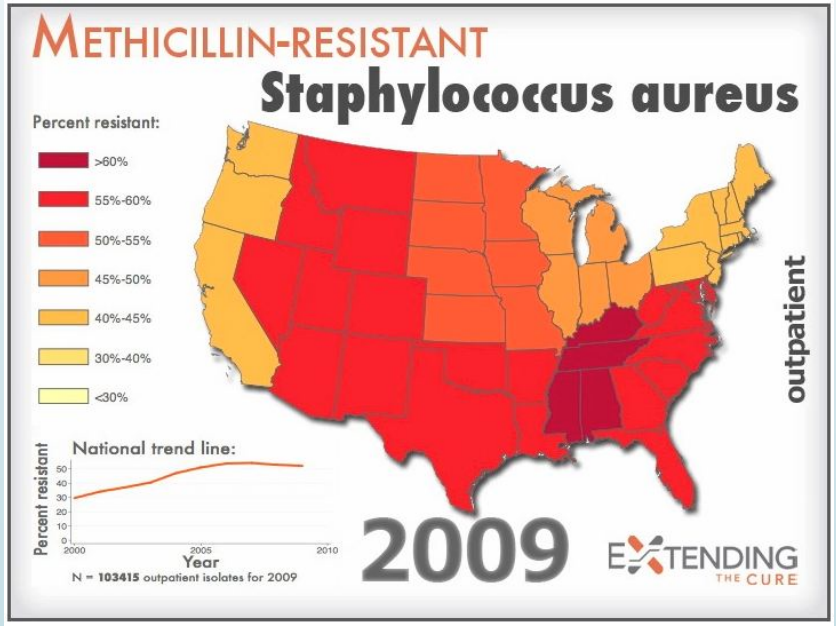
1. H-Cup Data (USA Today) – No
2. UHC (ICHE, 2013) – No
3. EIP (JAMA, 2010, 2013) – Yes
4. NHSN (Dept. HHS, 2014) – No
5. Pediatric Survey (Pediatrics, 2013) – No

Remember 85% of MRSA infections are Healthcare Associated.
HP2020 HAI Webinar - Aug. 16, 2011

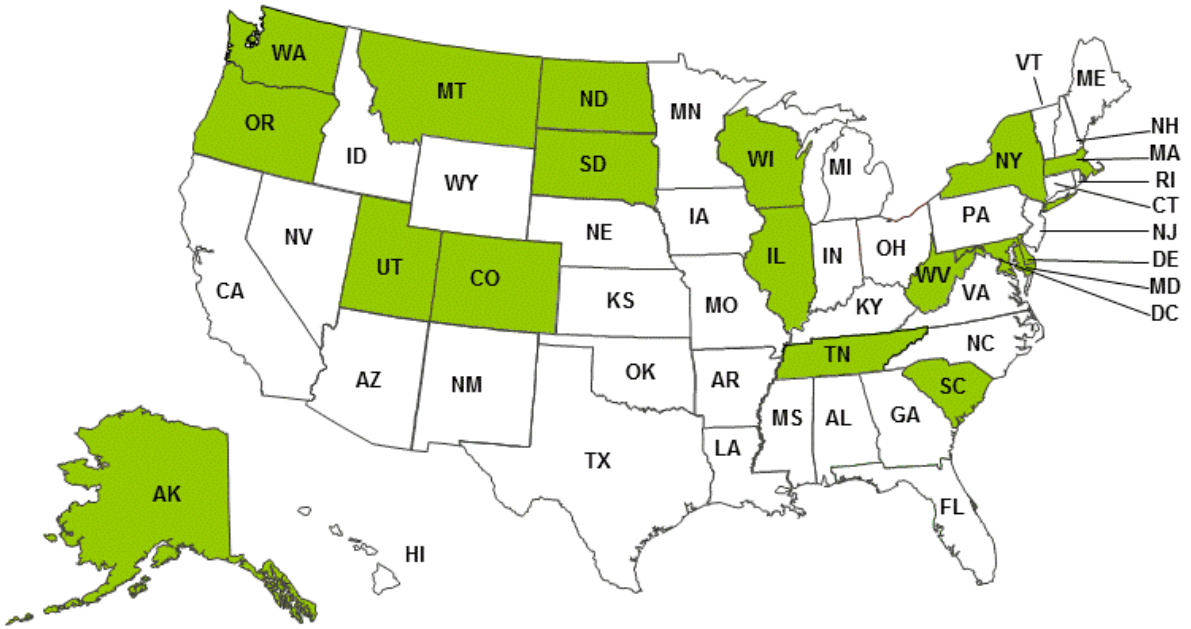


MRSA in Kentucky – (CDDEP Data)

- In Northern Europe – Less than 5% of Staph Cultures are MRSA Positive.
- In the United States – 50% of Staph Cultures are MRSA Positive.
- In the Region Kentucky Resides – Almost 70% of Staph Cultures are MRSA Positive.



State CRE Reporting Requirements



Statewide CRE Reporting

There were 35 Cases of The Virtually Untreatable Bacteria CRE Which Were Reported in Kentucky in 2013.

Table 2. Healthcare Facilities Reporting¶ Cases of Infection or Colonization with Emerging Pathogens of Public Health Importance--Kentucky, 2013

Organism	Hospital	Long Term Care Facility	Other
Carbapenem-resistant Enterobacteriaceae (*Escherichia coli*)	5	0	0
Carbapenem-resistant Enterobacteriaceae (*Klebsiella pneumoniae*)	12	3	0
Carbapenem-resistant Enterobacteriaceae (other spp)	12	1	2
Cephalosporin-resistant Klebsiella	1	0	0
Multi-drug resistant Acinetobacter	1	0	0
Vancomycin-resistant Enterococcus	2	1	2
Other MDRO	4	1	1
Total	**37**	**6**	**5**

Good or Bad Control in One Facility Can Affect Rates In Another Facility (Nursing Homes or Hospitals)

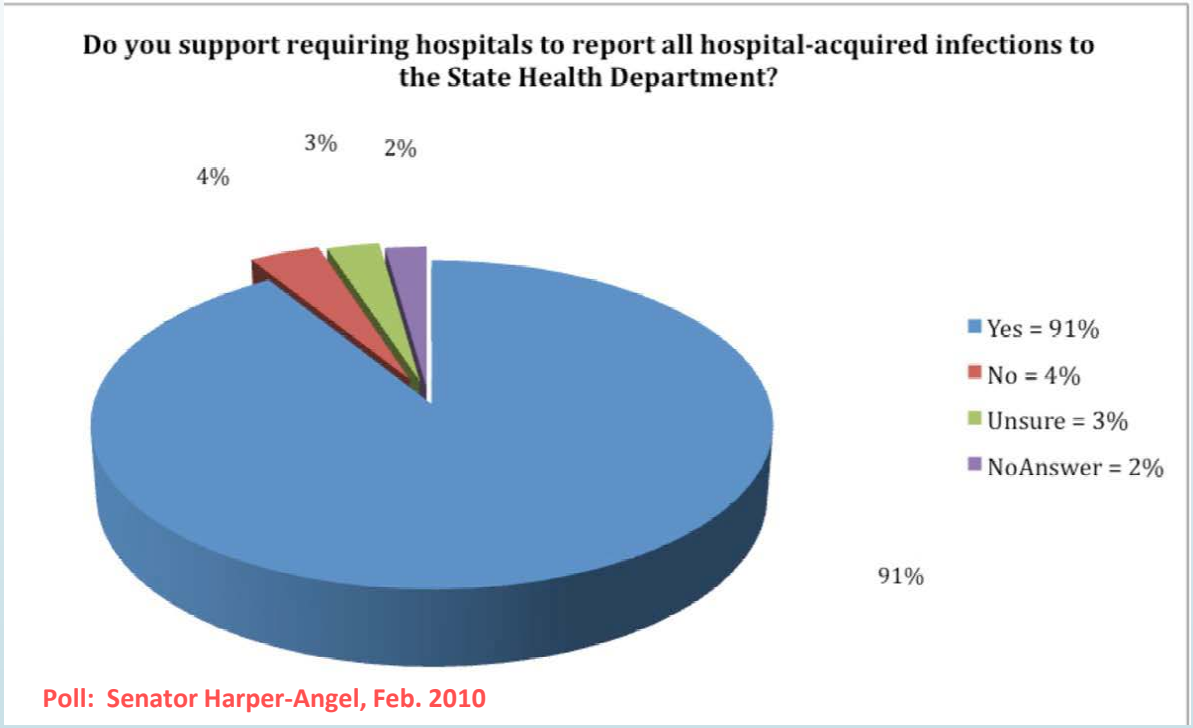
- "…the transmission dynamics of nosocomial pathogens, especially of multiple antibiotic-resistant bacteria, is not exclusively amenable to single-hospital infection prevention measures." Int J Med Microbiol 2013 PMID: 23499307 http://www.ncbi.nlm.nih.gov/pubmed/23499307

- "Our simulation demonstrated that each hospital's decision to test for MRSA and implement contact isolation procedures could affect the MRSA prevalence in all other hospitals." Health Affairs 2012 PMID: 23048111 http://www.ncbi.nlm.nih.gov/pubmed/23048111

Ciccolini M1, Donker T, Köck R, Mielke M, Hendrix R, Jurke A, Rahamat-Langendoen J, Becker K, Niesters HG, Grundmann H, Friedrich AW. Infection prevention in a connected world: the case for a regional approach. Int J Med Microbiol. 2013 Aug;303(6-7):380-7. doi: 10.1016/j.ijmm.2013.02.003. Epub 2013 Mar 13.

Lee BY, Bartsch SM, Wong KF, Yilmaz SL, Avery TR, Singh A, Song Y, Kim DS, Brown ST, Potter MA, Platt R, Huang SS. Simulation shows hospitals that cooperate on infection control obtain better results than hospitals acting alone. Health Aff (Millwood). 2012 Oct;31(10):2295-303. doi: 10.1377/hlthaff.2011.0992.

Over 90% of constituents want the data to go to the State Health Department.



Poll: Senator Harper-Angel, Feb. 2010

Poor Compliance With Voluntary Reporting

- Officials at the Joint Commission who estimated that only 0.1% of sentinel (severe) events are reported.(61)

  Levinson DR. Adverse Events in Hospital: Overview of key issues. Dept. of Health and Human Services, Office of Inspector General. Dec 2008, Page 25, 32 http://oig.hhs.gov/oei/reports/oei-06-07-00470.pdf

- An AHRQ survey found similar results with 48% of 614 facilities (with 143,052 respondents) that did not report any adverse events (sentinel or otherwise) at their institution.

  Sorras J. Hospital Survey on Patient Safety Culture: 2009 Comparative Database Report . AHRQ March 2009 http://www.ahrq.gov/qual/hospsurvey09/

- AMA News reported that as of 2007, approximately half of U.S. hospitals had never reported a physician to the National Practitioner Data Bank that was established in 1986.

  Sorrel AL. When is conduct reportable? National Practitioner Data Bank takes complaints from hospitals about physicians. American Medical News Sept 21, 2009 http://www.ama-assn.org/amednews/2009/09/21/prsa0921.htm

- Up To 90% of Adverse Events are Not Reported and Missed with Voluntary Reporting

  Classen DC1, Resar R, Griffin F, Federico F, Frankel T, Kimmel N, Whittington JC, Frankel A, Seger A, James BC. 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured. Health Aff (Millwood). 2011 Apr;30(4):581-9. doi: 10.1377/hlthaff.2011.0190. ntary Reporting.

CMS Removed Requirement for Keeping an Infection Log

- *"Infection Control Log:* **We have eliminated the obsolete requirement for a hospital to maintain an infection control log. Hospitals are already required to monitor infections and do so through various surveillance methods including electronic systems."**

  Federal Register Vol 77, No. 95, page 29035, May 16, 2012

Costs of Reporting Effort

For our healthcare system to come into line with the rest of the world we must decrease our costs by one third and increase quality.

We must do more with less. HAIs cost the US 30 Billion Annually.

- The VA Invests Heavily in Infection Control Despite cuts in budget.
  1) MRSA infections have fallen to 0.09 infections per 1,000 "bed days of care," or days patients stay in a bed, compared with 1.89 infections per 1,000 in 2008. (Courier Journal, Feb 3, 2014)
  2) Other hospitals do not release data. (Courier Journal, Feb 3, 2014)

Costs of Reporting Effort

Control and Cut Costs:

-- Technology Arms Race with little proven benefit.
-- Construction Arms Race with space sitting empty.
-- Medical Over Utilization
-- Salaries of administrative personnel are top heavy

- Infection rates are a nursing sensitive measure as defined by the American Nurses Association. In time of an economic downturn, one of the ways to balance operational costs is to cut staff which can be associated with an increase in adverse events and infections.

You May Hear: “We Already Do Not Get Paid For Infections”

- For Central Line Infections. Medicare leveled the following penalties. [For all hospitals nationwide (Chart F in Final IPPS regulations for years 2011 and 2012).]
  - In 2012 there were penalties for 20 events recouping $92,000,
  - In 2011 there were penalties for 26 events recouping $85,254.

You May Hear “We Don’t Have Good Definitions”

- If you can treat it and if you can bill for it, you can report it.

Consumer Union's Experience With Healthcare Ratings.

Ratings of health insurance are among the highest priorities for consumers. Drugs and pharmacies not far below that. Hospitals and doctors also important. Health ratings not as well established as cars or hotels but they are getting there.

Physicians ratings by Consumer Reports in Massachusetts, Minnesota and Wisconsin were associated with newsstand sales increases by 60-110%.

Readership ratings show that 80-90% of Consumer Reports read Consumer Report's hospitals and physician ratings articles. This is a very high percentage

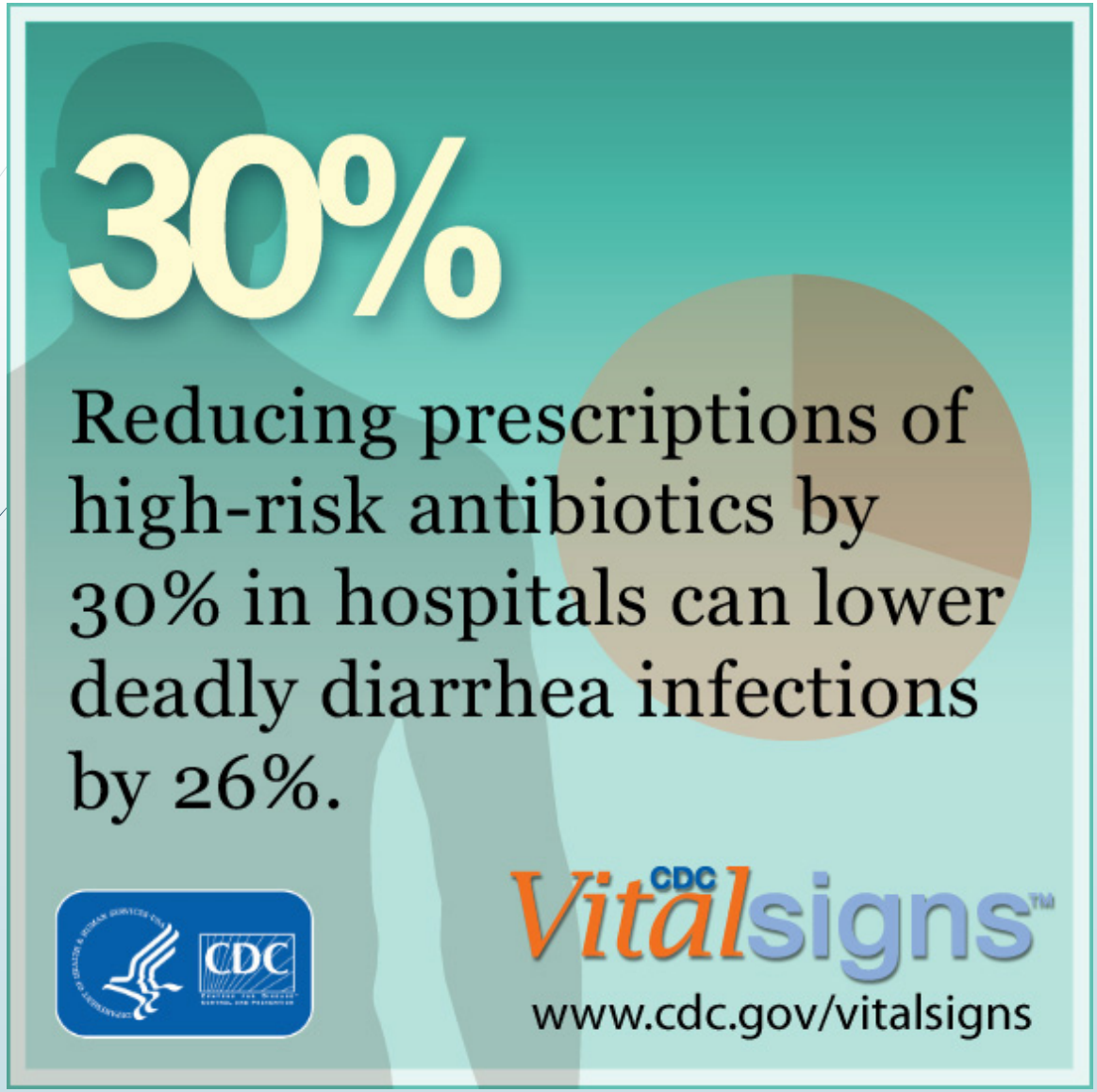
A Price WaterhousCooper survey of a nationally representative 1000 person sample showed Consumer Reports was the most common source of health reviews.

Legislation Empowers Consumers -- It is pro-free market

Two Choices:

- Solely Rely on the Government to Police the System by Regulations.
- To Empower Consumers by Information though transparency allows the application of free market pressures.

Kentuckians Have The Right To Know the Infection Rates at Their Facilities


30%
Reducing prescriptions of high-risk antibiotics by 30% in hospitals can lower deadly diarrhea infections by 26%.
CDC
CDC Vitalsigns™
www.cdc.gov/vitalsigns