Health Watch USA℠ Newsletter

www.healthwatchusa.org **April 15, 2017**
Member of the National Quality Forum and a designated "Community Leader"
for Value-Driven Healthcare by the U.S. Dept. of Health and Human Services

Healthcare Infections

The incidence of MRSA infections in the United States: Is a more comprehensive tracking system needed?

Antimicrobial Resistance and Infection Control

SHORT REPORT — Open Access

The incidence of MRSA infections in the United States: is a more comprehensive tracking system needed?

Kevin L. Kavanagh*, Said Abunaleem and Lindsay K. Calderon

Abstract

A review of epidemiological studies on the incidence of MRSA infections overtime was performed along with an analysis of data available for download from Hospital Compare (https://data.medicare.gov/data/hospital-compare). We found the estimations of the incidence of MRSA infections varied widely depending upon the type of population studied, the types of infections captured and in the definitions and terminology used to describe the results. We could not find definitive evidence that the incidence of MRSA infections in US community or facilities is decreasing significantly. Of concern are recent data reported to the National Healthcare Safety Network (NHSN) on MRSA bloodstream infections which indicate that by the end of 2015 there had been little change in the average facility Standardized Infection Ratio (SIR), compared to a 2010–2011 baseline and is significantly increased compared to the previous year. This is in contradistinction to the recent Veterans Administration study which reported over an 80% reduction in VRSA infections. However this discrepancy may be due to the inability to reconcile the baselines of the two data sets, and the observed increase may be artefactual due to aberrations in the NHSN tracking system. Our review supports the need for implementation of a comprehensive tracking and monitoring system including all types of healthcare facilities for multi-drug resistant organisms, along with concomitant funding for both staff and infrastructure. Without such a system, determining the effectiveness of interventions such as antibiotic stewardship and chlorhexidine bathing will be hindered.

Keywords: Surveillance, MRSA, Methicillin-resistant Staphylococcus aureus, EIP, Emerging Infection Program, Multi-drug resistant organisms, Epidemiology, VDRO, VA, CMS

Introduction

Recent investigative reports in the media has brought into question the adequacy of the United States' Methicillin-resistant Staphylococcus aureus (MRSA) tracking system along with whether the epidemic of MRSA is being brought under control [1].

Currently the United States has adopted a "one size does not fit all" approach and has relatively few mandates related to infection control. The Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria is studying these issues, but data supporting the contention that the MRSA epidemic is being brought under control appears to be largely derived from the Emerging Infection Program (EIP). The data from this program has come under criticism by the news media for its sample size, age and limited geographic representation [1].

Having a standardized reportable methodology with comparative data is critical to enable both researchers and policy makers to formulate and implement effective protocols to confront the epidemic of MRSA in the United States. The following are major epidemiology reports with varying methods of tracking and reporting of MRSA infections.

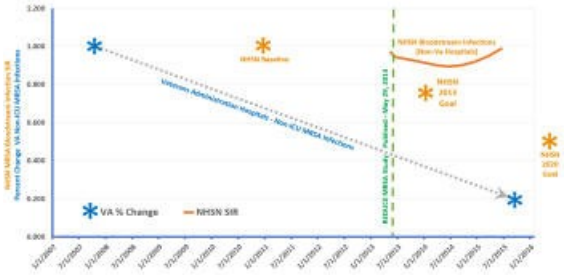
Emerging infection program (EIP)

There are three major papers which summarized progressive results in adult patients from the EIP surveillance program which derives its data from nine metropolitan areas in the United States [2–4]. Since each paper encompasses and adds onto the data previously reported, we will focus our comments on the last report of Dantes, et al. [4]. These studies reported "invasive"

BioMed Central

"Policymakers in Washington, DC appear to be focused on major funding of the development of new antibiotics. It is evident that one of the first steps we should take is the implementation of a comprehensive tracking system for monitoring resistant organisms, along with concomitant funding for both the staff and infrastructure. Without this, the difficulty achieving the 2020 MRSA reduction goal of 50% will be compounded. Determining the effectiveness of interventions such as antibiotic stewardship and chlorhexidine bathing will be hindered. In addition, the United States may not be able to accurately prioritize antibiotic development, and will have an encumbered early warning system for the emergence of resistance to newly developed antibiotics."

(Click on Pictures To Enlarge)



The figure to the right: "Graph of National (Patient Level) Standardized Infection Ratio (SIR) for MRSA Bloodstream Infections In relationship to MRSA goals and to the performance of VA hospitals in reducing total non-ICU MRSA Infections. Data was used only from hospitals that also had a calculable SIR. " The observed increase in the 2015 SIR "can be questioned due to aberrations in the data caused by compensation for community MRSA environmental pressure on facilities." Antimicrobial Resistance and Infection Control: https://aricjournal.biomedcentral.com/articles/10.1186/s13756-017-0193-0

REUTER'S Investigative Report: Money from infection-control industry muddies research into beating back superbugs

“It (REDUCE MRSA Study) really doesn’t make the case,” said Dr Kevin Kavanagh, a patient safety researcher whose objections to the study were published in a 2013 article in Antimicrobial Agents and Chemotherapy. “When you look at data, the vast majority of the effect on preventing infections was on the more benign skin bacteria and yeast.”
Reuters: http://www.reuters.com/investigates/special-report/usa-superbugs-research/

"Hand washing is an important but not the most important intervention to prevent the spread of MRSA. In many ways it is a back up measure. If a staff member has MRSA on their hands, then there has already been a failure in containment and control. MRSA is a very dangerous pathogen and needs to be treated as such." -- Kevin Kavanagh, MD, MS
https://healthwatchusa.info/2017/04/08/the-incidence-of-mrsa-infections-in-the-united-states-is-a-more-comprehensive-tracking-system-needed/

Universal Screening For the SuperBug CRE (CPE) Can Be Cost Effective

"Screening was not cost-effective at a prevalence below 0.015% or if transmission to fewer than 0.9 new patients occurred for each colonized patient. At prevalence levels above 0.3%, screening was cost-saving compared to not screening. Screening inpatients for CPE carriage is likely cost-effective, and may be cost-saving, depending on the local prevalence of carriage."
https://www.ncbi.nlm.nih.gov/pubmed/28078557

Health Care Quality

Preventable Hospital Deaths and Hospital Accreditation

Lexington Herald Leader Op Ed: “All preventable deaths should be counted and quality information needs to be readily available to the consumer. There is room for improvement in patient safety in every facility, even in higher functioning ones." Jim Conway, past Senior Vice President, Institute for Healthcare Improvement, aptly states: “In the gap between excellence and perfection, there is suffering, harm, tragedy, and death." http://www.kentucky.com/opinion/op-ed/article142832794.html

Flying Blind: Why do we keep blaming the victims of medical errors?

William Heisel: "We will never have perfect data on every death in the country, regardless of whether it happened in a health care setting. We need better tracking of the contributing factors to a health care-related error. We need better synthesis and analysis of that data. And we need to stop pointing the finger at patients to avoid taking a harder look at all the other pieces of the health care puzzle." https://www.centerforhealthjournalism.org/2017/03/17/flying-blind-why-do-we-keep-blaming-victims-medical-errors

Estimating hospital-related deaths due to medical error: A perspective from patient advocates. Journal of Patient Safety: http://journals.lww.com/journalpatientsafety/Abstract/2017/03000/Estimating_Hospital_Related_Deaths_Due_to_Medical.1.aspx

Doctors Throwing Fits

SLATE: "By reframing doctor-nurse relationships so that providers view each other as part of a team, managers would convey that every team member deserves to be empowered as they work together toward the ultimate goal: better patient care. And then, finally, the majority of bully doctors—and projectile surgical instruments—can remain in the past where they belong."
http://www.slate.com/articles/health_and_science/medical_examiner/2015/04/doctors_bully_nurses_hospital_mistreatment_is_a_danger_to_patient_health.html

Medical Finance

Why Selling Health Insurance Across State Lines Will Not Work

Multiple problems are discussed from lack of provider networks to a race-to-the-bottom caused by companies seeking headquarters in states with the most lenient oversight.
http://www.kentucky.com/opinion/op-ed/article140086978.html

==========

Health Watch USA's Apr. 19th Meeting

1:00 PM ET – Adobe Connect

HW USA will present a short webinar on the afternoon of April 19, from 1:00 PM to 3:00 pm. There will be two presentations:

- Dr. Neel Shah, MD, MPP, Assistant Professor, Harvard Medical School and Director of the Delivery Decisions Initiative at the Ariadne Labs for Health Systems
  Innovation:
  Presenting on the wide variation in cesarean section rates across the United States. (Time 1:00 PM to 1:45 PM ET on April 19, 2017)

- Reena Duseja, M.D., Director, Division of Quality Measurement, CMS, Quality Measurement and Value-Based Incentives Group:
  Presenting on Medicare's five star hospital quality rating system. (Time 1:45 PM to 2:30 PM ET on April 19, 2017)

To join the meeting, send an email to healthwatchusa@gmail.com

Health Watch USA's 2016 Healthcare Quality & Patient Safety Conference

Ideas for patient safety: collaboration, transparency, more nurses in hospitals and nursing homes, surgical patients' risk awareness.

Kentucky Health News. Nov. 20, 2016: "Patient safety was the topic at the 2016 Health Watch USA

conference this month in Lexington, with health advocates calling for a more collaborative and transparent health-care system to better prevent medical errors, improved nurse-to-patient ratios and a call for patients to become their own advocates to improve their safety in the operating room." http://kyhealthnews.blogspot.com/2016/11/ideas-to-improve-patient-safety.html

Presentation videos for the 2016 Conference are now online.
To view the conference presentations: Go To:
https://www.youtube.com/playlist?list=PLKKV6p_etRmPhxndxzrvt7yeE-ICUmqzK

==========

To subscribe to Health Watch USA[sm] newsletter go to:
http://www.hwusa-newsletter.org/lists/?p=subscribe&id=1

Visit and "Like" HW USA's Facebook Page at:
https://www.facebook.com/HealthWatchUsa