Confronting the Epidemic of MDRO’s

Health Watch USA
Forum on Antimicrobial Resistance
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This presentation is the express opinions of Health Watch USA and the presenter.
Strong Research In Support of Surveillance

Union of Concerned Scientists: “Downplaying evidence and playing up false uncertainty”
Strong Research In Support of Surveillance

Only two major studies with arguably poor designs. STAR*ICU and the JAMA-Swiss Study found Surveillance did not work.(1)

Compared to numerous before & after studies (1)
Plus, well controlled studies from Northwestern University (2), Geneva, Switzerland (3) and Sevilla, Spain (4) which found surveillance to be vital in the prevention bundle.

1. Kavanagh KT, et al. PMID 24100502
2. Robicsek A, et al. PMID 18347349
3. Lee AS, et al. PMID 24056477
4. Rodríguez-Baño J, et al. PMID 20524852
Research for The Effectiveness of Chlorhexidine Is Controversial
Allegations of Industrial Influence

• Questions of Conflict-of-Interest and Industrial Influence first arose around a major study published in the NEJM (2010) regarding the effectiveness of a chlorhexidine-Alcohol antiseptic. (1,2)

• This study was part of a $40 million Dept. of Justice Settlement with CareFusion and an alleged 11 million dollar kickback. (3)

Change in Metrics Raise Concerns

Changes to NCT00980980 on 2012_06_19
Type of info changed: Protocol, Misc.

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<td><strong>Noseoeial MRSA Bloodstream and Urinary Cultures</strong></td>
<td>MRSA Bloodstream <strong>Infection</strong></td>
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<td><strong>Routinely reported central line associated blood stream infections (CLABSI):</strong></td>
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From [www.clinicaltrials.gov](http://www.clinicaltrials.gov)
Effectiveness of CHX

- Maiwald and Chan could find “no evidence that chlorhexidine without alcohol was effective” and that many trials compared chlorhexidine plus alcohol (two antiseptics) to povidone-iodine alone (one antiseptic) with some trials then attributing the clinical efficiency to chlorhexidine alone.

Bacterial Resistance Concerns
Daily Chlorhexidine Usage Has a Risk of Worsening Bacterial Resistance
Multiple Studies Are Finding Reduced Susceptibility to Chlorhexidine

Organisms causing CLABSIs were more likely to have reduced chlorhexidine susceptibility in patients bathed daily with chlorhexidine,


MRSA chlorhexidine resistance is an independent factor predictive of decolonization failure.

Research Indicates Daily Chlorhexidine Has a Risk of Worsening Bacterial Resistance

• Because Chlorhexidine is used externally it affects the entire microbiome of the facility.

• The extremely drug resistant strain of Klebsiella can develop reduced susceptibility to Chlorhexidine.

Research Integrity

- Metrics are not changed after trial initiation.
- All data is reported.
- Compare new therapy to existing current therapy.
- Fair comparison, not two agents against one.
- Proper intervention is given to patients with known carriers being treated.
- If a test is ordered, results are readily accessible – Not five days delayed.
- Conflicts of Interest are declared.