Getting it Done! Implementing Transformational Change to Improve Patient Outcomes

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Disclosures

Consultant

APIC-Consulting

Arrowsight

Global Life Technologies Corp.

Molnlycke Health Care

Relias

Inception Xr inc.

Learning Objectives

- 1. Describe burnout and strategies to address.
- 2. Define transformational and sustainable change.
- 3. Discuss the need to Identify priorities and strategies
- 3. Describe barriers to change and strategies to mitigate.
- 4. Identify the steps to effective change management.

Infection Prevention and Control

Current State

- Post-COVID-19: CDC NHSN HAI SIRs slowly declining
- Impact of Finance on operations e.g., cost of staffing, supply chain, throughput
- Infection Prevention challenges across the continuum
- Regulatory environment
 - e.g., penalties, improving infection prevention programs; regulatory reform for skilled nursing facilities



Burnout

A state of mental exhaustion caused by one's professional life.

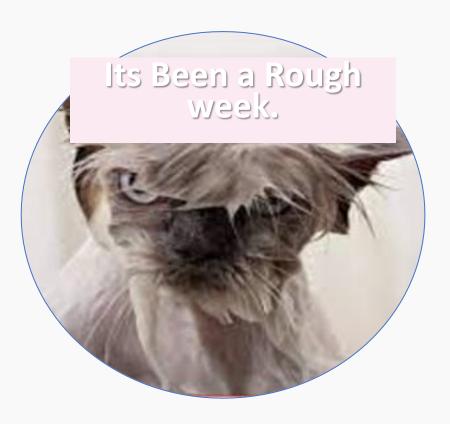
- Burnout rates are well over 40% in most clinical groups.
- 3 Categories of Symptoms:
- Emotional exhaustion
- Depersonalization (treat people as objects, cynicism)
- > Sense of low personal accomplishment
- Causes
- Qualities that help us handle the challenges of being a clinician: Self-deprivation, wanting to seem in control emotionally and in work outcomes
- External factors: Workload, colleague relationships and level of autonomy.

Stress vs Burnout

| Stress | Burnout | |
|------------------------------------|--------------------------------|--|
| You put in too much effort | It's hard to put in any effort | |
| You feel emotions more strongly | Your emotions feel blunted | |
| You feel hyperactive and anxious | You feel drained and helpless | |
| You have less energy | You have less motivation | |
| It takes a physical toll | It takes an emotional toll | |

The Day- to -Day Life of the Infection Preventionist





What Causes Burnout?

External causes leading to burnout

- Larger patient panels
- Higher productivity requirements
- Decreasing resources
- •The overall culture of medicine and nonalignment of organizational and individual values
- Lack of autonomy, flexibility, or control
- •A sense of providing poor care
- Lack of fulfillment in one's work life
- •Encountering too many difficult people, including patients, colleagues, supervisors, or staff
- •Problems with balancing professional life with other parts of one's life (work-life "blend")
- Excessive administrative and bureaucratic tasks
- New expectations and demands
- •Hostile workplace, including challenges that arise due to gender, race, or age
- Malpractice suits

Internal factors leading to burnout

- •Specific character/personality traits, such as: [24]
 - Low "hardiness" (limited involvement in daily events, sense of no control over events, and unwillingness to change)
 - Diminished external locus of control (feeling as though chance or other people have more power to bring about change than oneself)
 - Tendency to be time-pressured, competitive, hostile, and controlling by nature
 - Perfectionism
 - Unrealistic expectations about patient outcomes
 - Passive coping styles. That is, you tend to withdraw when challenges arise, versus invest the energy needed to confront them.
- Lack of a sense of meaning
- •A mentality of delayed gratification.
- Guilt and an exaggerated sense of personal responsibility

Which Burnout Factors Affect You?

Self awareness Moment

- Which factors are present in your life?
- How might you make changes to reduce how they factors can influence you?
- Consider asking someone you know well their opinion.
- Try not to make judgements about what you discover. Learn from it.

"Self Awareness Allows
You to Self-correct. " Bill Hybels

Effects of Burnout

- Marital and family Discord
- Medical error and adverse patient events
- Poorer decision making
- Accidents
- Decreased attention and concentration
- Less empathy
- Personal health problems

 (e.g. anxiety, substance misuse, fatigue, depression, heart disease)
- Difficult co-worker relationships
- High job turnover
- Decreased Productivity

How can Burnout be Prevented or Reversed?

Resilience

The process of adapting well in the face Of adversity, trauma, tragedy, or significant Sources of stress.



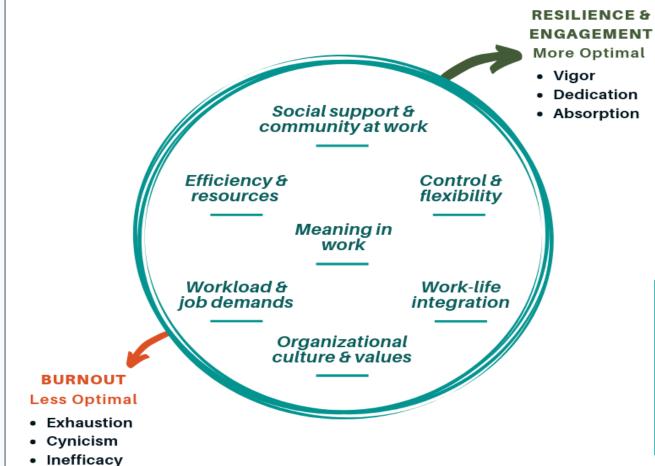
Circle of Resilience

Resilience

- 1.Being clear on what you need and value both personally and professionally
- 2. Cultivating insight (Self Awareness)
- 3. Taking care of yourself (hygiene, nutrition, Lifestyle, environment, health, socioeconomic)
- 4. Receiving support of others—at both the local and organizational level



THE KEY DRIVERS OF BURNOUT



The Infection Preventionist has a broad organizational influence to impact change and pave the way of future success.





Our Present and Future: A Call To Action

Regain

 Wellness: Self-ware, Resilience, Work / Life Balance; Passion.

Facilitate Change

 HAI rates: Back to Basics; Embrace / facilitate new ideas

Create

 The new normal: Establish personal and organizational priorities

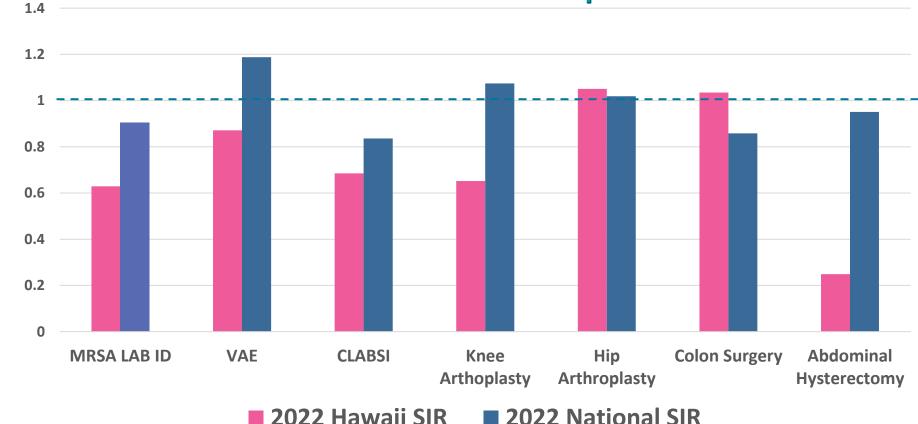
Embrace

 Curiosity: Who, What When, Where to improvement using teams

2022 NHSN Hawaii SIR Comparison to National

Comparing
Hawaii SIR to
National SIR
NHSN 2022

Comparison Hawaii SIR to National SIR 2022 for Acute Care Hospitals



CDC. Current HAI Progress Report. 2023. Retrieved March 10, 2024 @Current HAI Progress Report | HAI | CDC

The Challenge of Change

Saving lives is worth the effort.

- 70% of change efforts fail
- 33% Management behavior does not support change
- 39% Employees are resistant to change
- 14% Lack of resources

Focus on strategies and processes that will have a MEANINGFUL impact!

Change: Transform & Sustain

Transformational Change

Fundamental change in how the organization operates and is often triggered by changes in the environment:

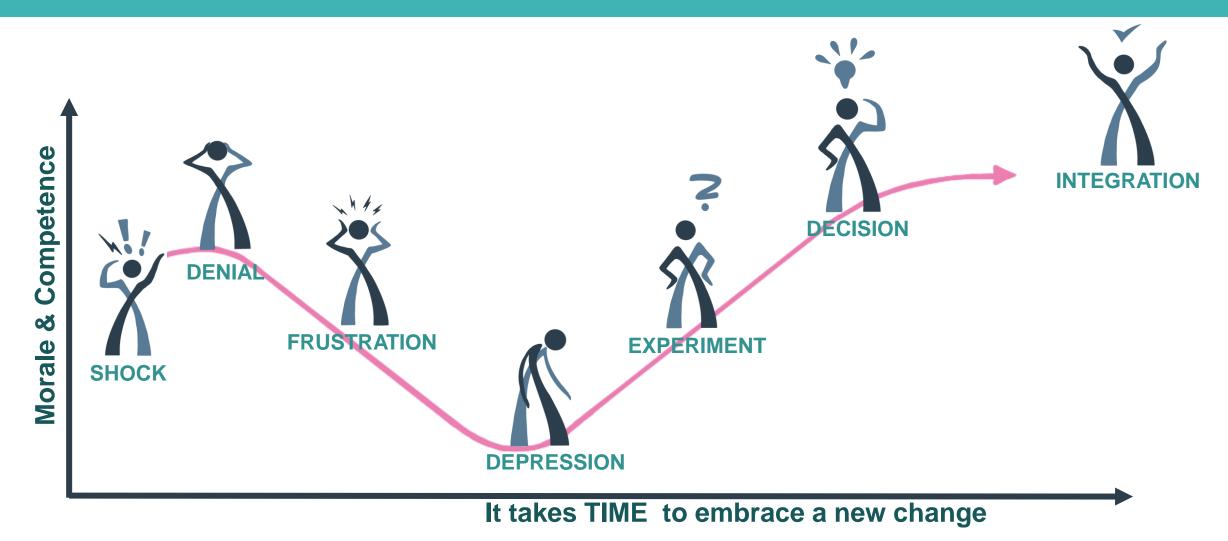
- New vision
- New goals
- Culture change
- New ways of doing things

Sustainable Change

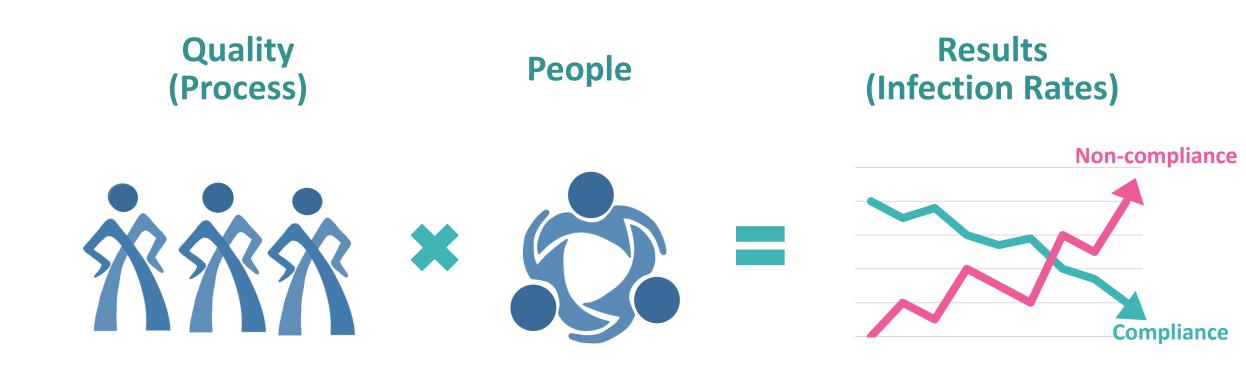
The process of making sustainable improvements that will last over time:

- Why change? (need, readiness, scope)
- Plan (Approach, Stakeholders/ buy-in; transition & integration)
- **Implement** (Communicate, mobilize, process change)
- Manage & Sustain (ongoing measurement & communication)

Real Change Does Not Happen Overnight



The Key To Success = People



Change Acceleration Process Model: "Go Slow to Go Fast"

LEADING CHANGE



CHANGING SYSTEMS & STRUCTURES

Common Sense, Not Common Practice

LEADING CHANGE



ORGANIZATION

- Strong Commitment to Change
- Change Needs Structure & Planning
- Address the People Side of Change:
 - Acceptance
 - Accountability
 - Alignment

Team Consensus

Includes

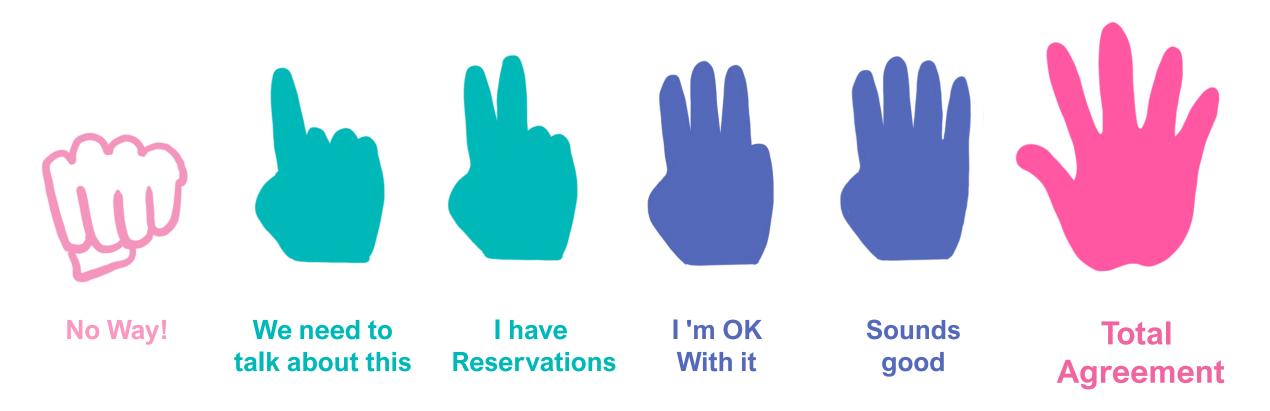
- **✓** Pooling opinions
- ✓ Listening effectively
- ✓ Discussing ideas & differences
- ✓ Not getting all you want
- ✓ Coming to an agreement that everyone "can live with"

Consensus is not

- X A unanimous vote
- X Majority or minori y ru'
- X One person rule; or
- **X** Bargaining

Team Consensus

Consensus Tool: Fist to Five





Stakeholder Analysis

Stakeholders: People/ Groups that are Keys to Success

| Stakeholder/ Group | Impact Level | Level of Support | Reason for Resistance or Support | Actions to Address | Contact |
|-------------------------------|--------------------|------------------------------|--|---|--|
| CNO | Decision Authority | Resister | Lack of understanding rationale;Political MD vs nursing | Meeting: Include CLABSI MD leaderMeeting outcome: Plan of action | C. Steed |
| RN | Impact Outcome | Mixed: Some Resistance | Concern about impact on time | CNO meeting;Staff meetingsOutcome: Next steps | C. Steed; Unit champions CLABSI Team |
| Value Analysis Chairman | Decision authority | Resister | Lack of knowledgeNeeds ROI | Meeting Review ROIValue A committee | ID MD/ IP lead |

Change Acceleration Process (CAP) - isixsigma.com





Implementation

Plan & Schedule

- People
- Gather information:
- Sensing sessions
- Evidence / best practice process

Supplies

IT (MAR; EMR)

Education & Training

Process & outcome monitoring

W, W, W Timeline

| Subject | Action | Who is Responsible | Schedule/ Due Date |
|---------------------|---------------------------|-----------------------|--------------------|
| Sensing Sessions | Talk to staff on Med/surg | Connie & Bill | 10-1-2024 |
| | | | |
| | | | |
| | | | |
| | | | |

Making Change Last

INFECTION REDUCTION: 100% overall decrease

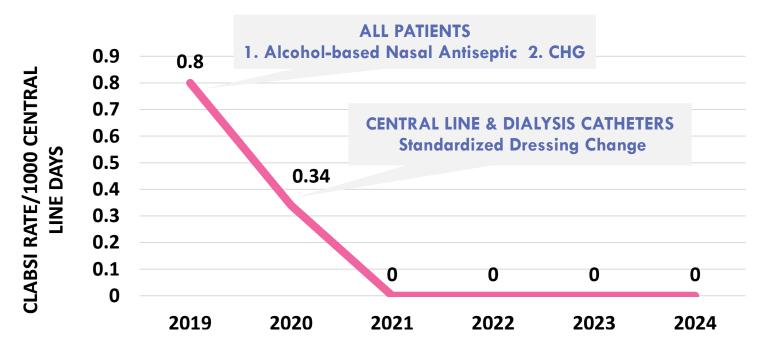
1st Intervention:

57.5 % decrease (0.8 to 0.34)

2nd Intervention:

42.5 % decrease (0.34 to 0)

The Role of Universal Decolonization and Standardized Dressing Changes in Preventing CLABSI



COMPLIANCE:

- Optimization Specialist sent compliance reports on CHG and Alcohol-based nasal antiseptic decolonization daily to unit leaders.
- Unit Leaders completed the audit tool the day after the dressing change was due.

The MH Rapid City Story*

300 Staffed beds, Community Hospital in Rapid City, South Dakota



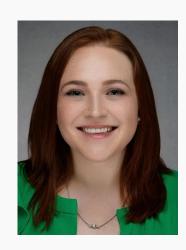
GO SLOW TO GO FAST THE JOURNEY TO ZERO HARM







Ty, IP Director



Kristyn IP

^{*}MH Rapid City story content reviewed and approved by representatives of the organization.

MH Rapid City Hospital Background

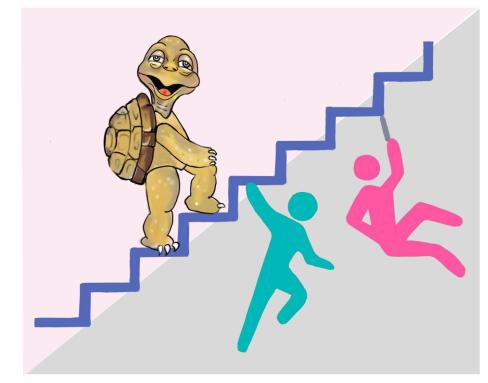
- Lou, Infection Preventionist's previous experience in another acute care hospital: Reduced CLABSI to Zero for 625 days.
- Targeted Screen & Isolate; Pilot to assess replacing Screen & isolate with nasal antiseptic
- Antimicrobial bathing of patients since 2016
- Existing Device related Prevention Bundles in place
- CLABSI, PVAP, and other HAI rate increases during 2021
- Strong Quality organization

MPORTANCE

Problem: Increased CLABSI, Other HAIs

Shared Need: Reduce HAIs

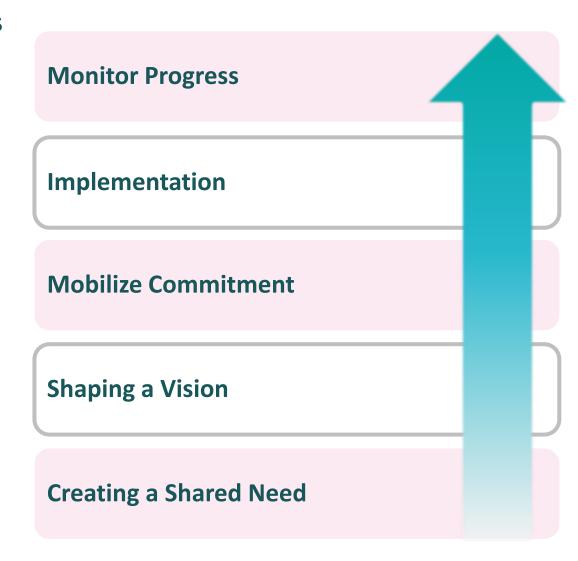
Shaping a Vision: Getting to Zero



CHALLENGE

Finding your Way

Finding Excuses



Shaping a Vision

Reduce
CLABSI
Getting
to Zero

ACTION

 CLABSI Team Conducted Literature Review/ Root Causes

RECOMMENDATIONS

- Bundle compliance improvement
- Remove Midlines within 14 days
- Add nasal decolonization with broad-spectrum nasal antiseptic

Shaping a vision continued Why Nasal Decolonization

Infection Control Risk Assessment: Staph Aureus

| S. aureus Colonization Risk | Baseline Estimates | Intervention Estimates* |
|--|--------------------|----------------------------|
| Total S. aureus Colonized Patients | 8,088 | ~0 |
| Total S. aureus Colonized Patients Days | 29,938 | ~0 |
| Hospital Staff in Contact with a Colonized Patient | 2,658,494 | ~0 |
| Risk of S. aureus Infection-related Readmission | 2,233 | ~0 |

^{*}Dependent on compliance with nasal antiseptic decolonization protocol

The Why: The Role of the Nasal Vestibule in HAIs

Nasal vestibule colonization is a main risk factor for infection 1,2



Staph aureus BSI



Staph aureus SSI



Staph aureus Pneumonia

80% of Staph aureus BSI^{1,2}and SSI³ and 94% of Staph aureus bronchial strains⁴ can be traced to the patient's own nasal vestibule flora.

The Flora of the Nasal Vestibule

Normal Flora

Propionibacterium spp. Corynebacterium spp.

Streptococcus spp. Lactobacillus spp.

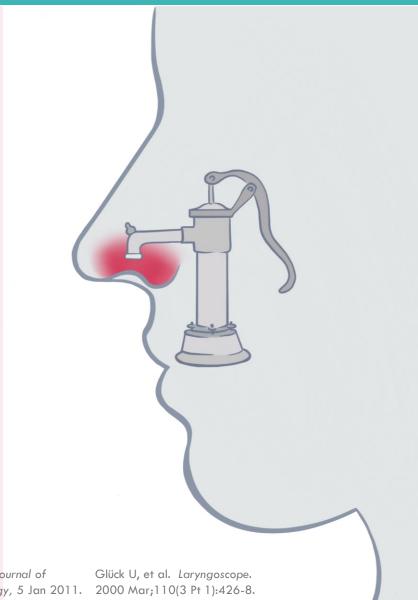
Staphylococcus spp.

Coag-negative staphylococci Staphylococcus aureus

Intermittent Low-Level

Enterobacteriaceae Pseudomonadaceae

Moraxellaceae Yeast



The Chain of Infection

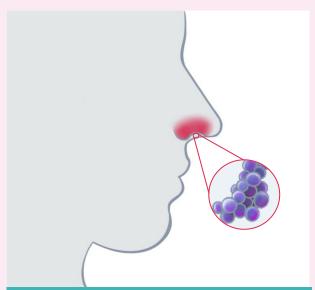
Nasal Vestibule as the main reservoir

THE MAIN RESERVOIR

PORTAL OF EXIT

TRANSMISSION

PORTAL OF ENTRY



Nasal Vestibule Colonization



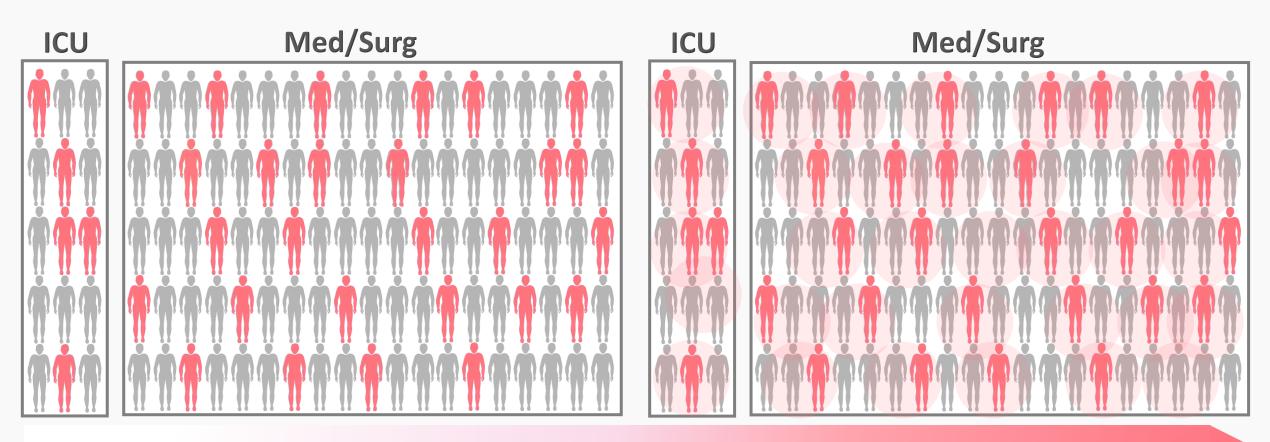
The Nasal Vestibule

- ENDOGENOUS SOURCE Self-Inoculation
- EXOGENOUS SOURCE
 - Direct Contact
 Hands
 - Indirect Contact
 Environment
 - Respiratory Short Range

- EYES, NOSE, MOUTH
- NON-INTACT SKIN
- DEVICES
 - Central lines
 - Drains
 - Tubings
 - Hubbs
 - Dressings
 - Tracheotomy Site
 - Surgical Incision
 - Wounds
 - Pressure Sores

Visualizing Colonization Pressure

Colonized Patients Increase Colonization Pressure
Through Transmission and Acquisition



^{*} Illustrative example of admitted patients that are colonized and pose an ongoing transmission risk

Shaping a Vision Literature Review: Nasal Decolonization? Independent Studies

SSI Reduction

| | BASELINE | | | PATIENT | OUTCOME | |
|---|---------------------|-----|---|---------------------------------------|--|--|
| AUTHOR | Nasal Product | CHG | INTERVENTION | POPULATION | Infection Reduction | |
| Bostian, 2023 Surgical Infections | none | ✓ | Pre-Op and Post-Op Daily Alcohol Nasal Antiseptic | All Total Joint Arthroplasty Patients | 41% All cause SSI total joints (1.5 to .64) | |
| Franklin, 2020 AJIC | none | ✓ | Pre-Op and Post-Op Daily Alcohol Nasal Antiseptic | All Total Joint Arthroplasty Patients | 100% All-cause SSI total joints (Hip .91 to 0) (Knee .36 to 0) | |
| Gnass, 2020 Open Forum Infec. Dis | Povidone- lodine | ✓ | Pre-Op and Post-Op Daily Alcohol Nasal Antiseptic Voluntary Staff Use | All Surgical Patients | 63% All-cause SSI (2.27 to .80) | |
| Arden, 2019 Open Forum | Mupirocin | ✓ | Pre-Op and Post-Op Daily Alcohol Nasal Antiseptic | All Inpatients | 100% All-cause SSI (.069 to 0) | |

MRSA Bacteremia Reduction

Impact of a Stepwise Intervention on HO MRSA Bacteremia SIR

Phase 1(Baseline) ICU PATIENTS

-Target, Screen, and Isolate detected MRSA (+) -Universal daily CHG wipes.

Phase 2 ICU PATIENTS

- Continue Targeting, Screening, and Isolating for detected MRSA (+)
- Add 5 BID course with mupirocin for all ICU patients
- Add Daily CHG bathing for all inpatients

Phase 3

ADD ALL INPATIENTS

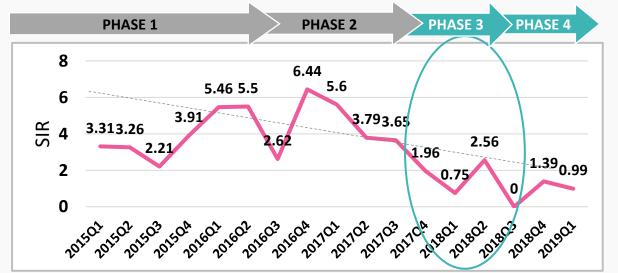
- Stop Targeting, Screening, Isolating, and Mupirocin
- Add Universal Decolonization with Daily Nasal Antiseptic for LOS
- Continue CHG bathing

Phase 4

CONTINUE ALL INPATIENTS

- Continue Universal Decolonization with Daily Nasal Antiseptic for LOS
- Continue CHG bathing
- Add Hand-sanitizing wipes

HO – MRSA Bacteremia SIR



74% Reduction in MRSA Bacteremia SIR

MRSA Bacteremia SIR decreased significantly from 3.65 (Phase I baseline) to 0.96 (Phase 4)* p-value= 0.003

The Efficacy of an Alcohol-based Nasal Antiseptic versus Mupirocin or Iodophor for Preventing Surgical Site Infections - A Meta-analysis

QUESTION:

Does an alcohol-based antiseptic (ABA) used for nasal decolonization work as well as mupirocin or iodophor to decrease surgical site infections?

METHODS: META-ANALYSIS AND SYSTEMATIC REVIEW

147 Nasal titles for decolonization prevention were identified

7 Cohort studies met criteria

16,212 Total patients

8129 Patients (50.14%) Intervention group

7983

Patients (49.24%) Control group

RESULTS:

ABA vs CONTROLS

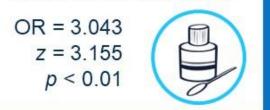
OR =
$$3.178$$

 $z = 4.743$
 $p < 0.001$

ABA vs MUPIROCIN



ABA vs IODOPHOR



K. Hoffmann, C. Steed, D. Kremelberg, R. Wenzel "The Efficacy of an Alcohol-based Nasal Antiseptic versus Mupirocin or lodophor for Preventing Surgical Site Infections - A Meta-analysis"



CONCLUSION:

Statistically significant positive effects were identified in all three meta-analyses.

An alcohol-based antiseptic (ABA) appears to be a superior alternative to mupirocin or iodophors to reduce SSIs.

Visual Abstract by Amiranda@abzhealthfrontiers.com

AORN Recommendation Highlights for Nasal Decolonization

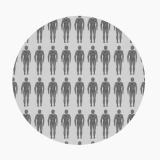


Updated AORN

Guidelines on

Preoperative Skin

Antisepsis (2021)



Interdisciplinary Risk Assessment

Section 1.2.1

Universal decolonization (vs. targeted) resulted in greater efficiency and lower cost due to SSIs prevented



Nasal Decolonization Agent

Section 1.3.1

An alternative to mupirocin is the use of an antiseptic



Implementation

Section 1.4

Postop decolonization: Surgical patients may benefit from relatively short-term decolonization or until the surgical incision has healed

Strategy Guidelines to Prevent Hospital-Onset methicillin-resistant Staph Aureus Transmission in Acute Care Facilities

CDC/SHEA/IDSA/APIC- Decolonization

ICU Patients

Decolonize all patients* with intranasal anti-staphylococcal.

Non-ICU Patients

Decolonize patients* with CVC or midline catheter.

Surgical Patients

Decolonize all patients* undergoing high-risk procedures.

SHEA/ IDSA/ APIC

Considerations for facilities to modify contact precautions for all MRSA-colonized or MRSA-infected patients

- Conduct MRSA Risk Assessment
- Consider implementing an MRSA decolonization program for certain high-risk groups (e.g., ICUs. Burn unit)
- Monitor key metrics, e.g., decolonization compliance, care bundles

Universal decolonization benefits

- Avoids testing and provides treatment to the entire at-risk population.
- May also help reduce MSSA
- Help address concern that a single screening of limited body sites is insufficient to identify all MRSA carriers

^{*} Decolonization agent varies according to guidelines, antibiotic and/or antiseptic

Strategies to Address Resistance to change

Resistance is a normal human response to change

- Plan for resistance
- Right from the start: practice change management
- Frontline: engage & involve in the change from the beginning
- Engage: senior leaders as active sponsors
- Recruit: influencers and champions
- Communicate: the need for change and its impact on employees and patients

What is in it for me?

- Listen: work to address resistance and mitigate it.
- Celebrate Success in Making a Difference: positive feedback



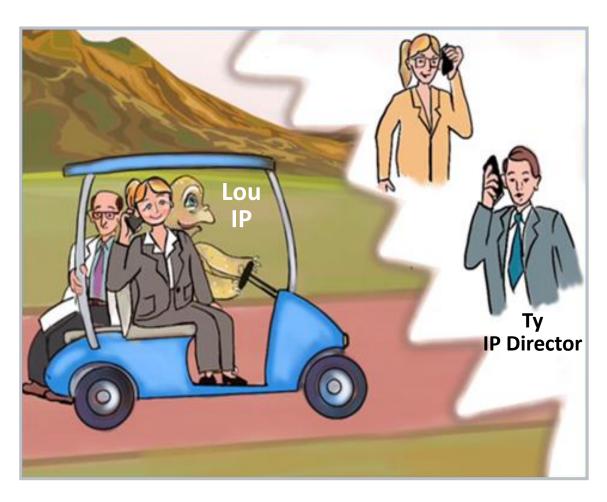
Sensing Sessions

Informal Meetings with employees

- Speak Freely about change
- Listen
- Identify resistance/under-the-radar issues
- Address the "why change"



The Monument Health Story Mobilize Commitment



OBJECTIVE:

- Team of committed supporters
 Co-champions, Stakeholders
 - IP
 - Pharmacy
 - Medical Staff
 - CNO
 - C-Suite
 - Frontline Staff
- Identification of potential resistance
- Conversion of key influencers

The Success of Implementation

Mobilize Commitment

WE ARE BETTER TOGETHER



Facilitator
Infection Preventionist
Nurse Leader
Industry Partner

Front Line Administrativ Representatives Sponsor

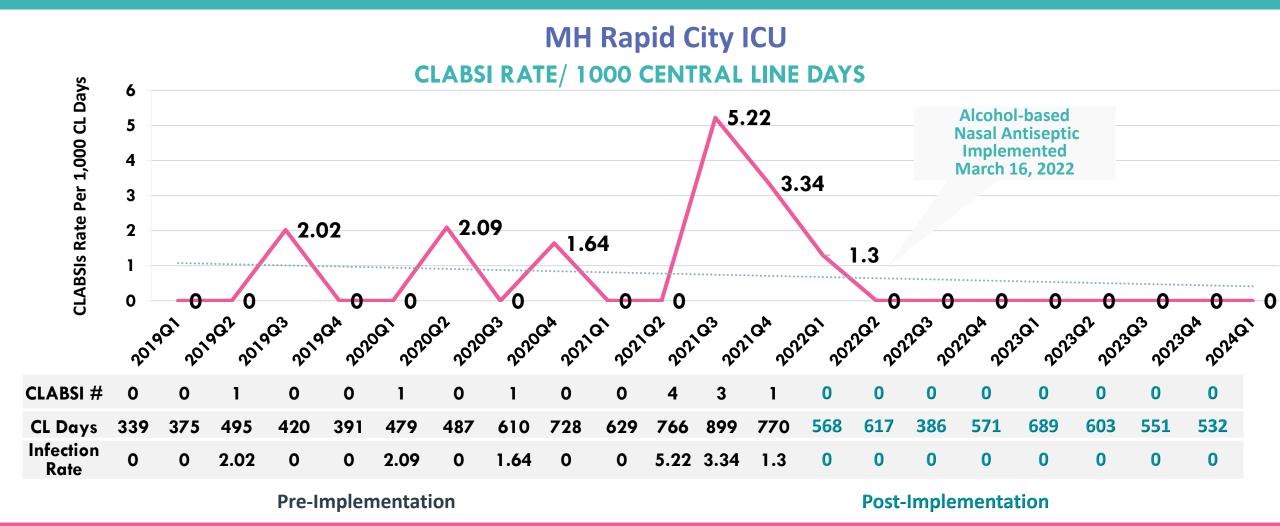
Administrative Nurse Manager Sponsor Representative **Supply Chain Representative**

Clinical Educator

Pharmacy

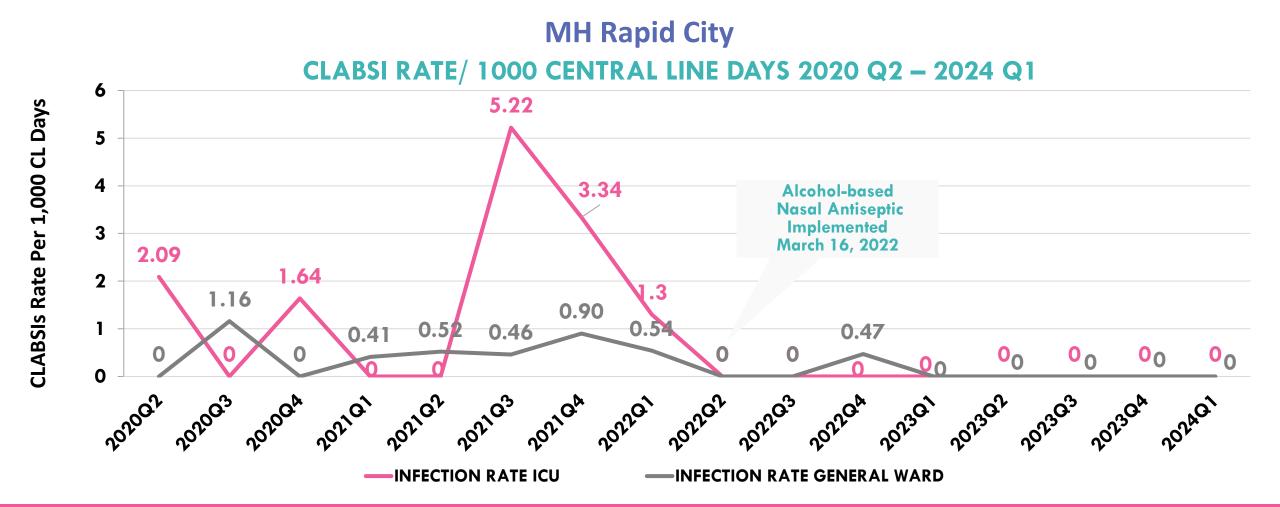
Information Technology Representative

APIC 2024 - The Addition of Nasal Antiseptic to Universal Decolonization Programs Reduces Central Line Associated Blood Stream Infections in Intensive Care Units



100% decrease in CLABSIs, 1.54 to 0 (p=.01) ICU

MH Rapid City ICU vs General Ward



Impact of Reducing Colonization Pressure on CLABSI in the ICU and Non-ICU Units

~Cost of CLABSI Pre versus Post-Implementation

| Q2 2020 - Q1 2022 | | | | Q2 2022 – Q2 2024 | | | |
|-------------------|-------------------------|---------------------|-----------------|---------------------|--------------|-----------|---------------------------|
| Type of Infection | Avg cost/ infection* | Pre- Implementation | | Post-Implementation | | % | Total Estimated |
| | | No. of HAIs | ~Cost of HAI | No. of HAIs | ~Cost of HAI | Reduction | Treatment Cost Reduction |
| | | ПАІЗ | ПАІ | ПАІЗ | | | |
| CLABSI | \$48,108 ¹ | 19 | \$914,052 | 1 | \$48,108 | 95% | \$865,944 |

Potential Gained Revenue through Excess LOS Days Avoided

| Q2 2020 - Q1 2022 | | | | Q2 2022 – Q2 2024 | | | |
|-------------------|---|--------------------|---------------|---------------------|---------------|-----------|--|
| Type of Infection | Avg excess LOS for ¹ infection | Pre-Implementation | | Post-Implementation | | % | Potential Gained |
| | | No. of HAIs | Excess LOS | No. of HAIs | Excess LOS | Reduction | Revenue through Excess LOS Days Avoided ³ |
| CLABSI | 7.54 ² | 19 | 143.26 | 1 | 7.54 | 95% | \$852,153 |

(Excess LOS avoided) x (census) x (est. daily net patient revenue) (136) x (96.3%) x (\$6,520/day Monument Health) = \$852,153

SSI Reduction

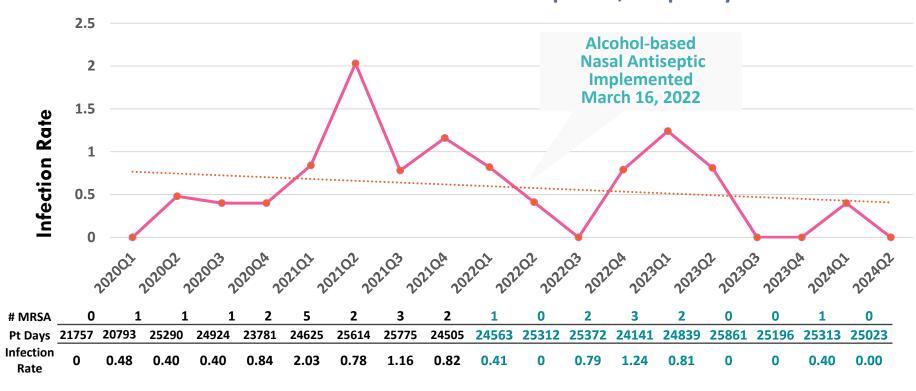
| | BASELINE | | | PATIENT | OUTCOME | |
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MH Rapid City MRSA Bacteremia 2020 — 2024 Q2

Pre-Implementation vs.
Post-Implementation Comparison:

49% decrease in MRSA Bacteremia, p=.082

MH MRSA Bacteremia Lab ID per 10,000 pt Days



Pre-Implementation

Post-Implementation

Monument Health Rapid City SSI 2020 Q2 - 2024 Q2

1.30 1.38

Pre-Implementation

Pre-Implementation vs.

Post-Implementation Comparison:

38% decrease
in NHSN All Procedures Adult
Complex SIR p=.003

Actions:

- Implemented Pre and Post- op Nasal decolonization with nasal antiseptic for all surgeries where incision made.
- 2. Implemented Colo- Resection bundle

SIR

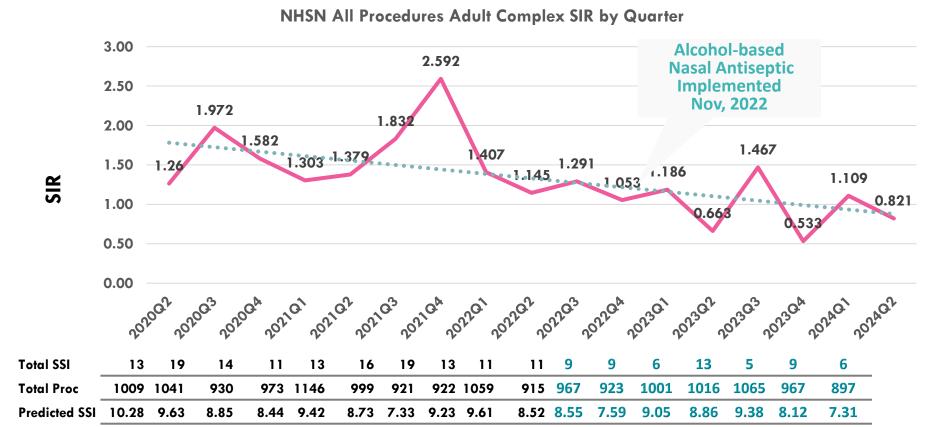
1.26

1.97

1.58

3. Compliance Monitoring

MH Rapid City SSI



1.83 2.59 1.41 1.15

1.29 1.05

1.19

0.66

1.47

Post-Implementation

0.53 1.11

0.82

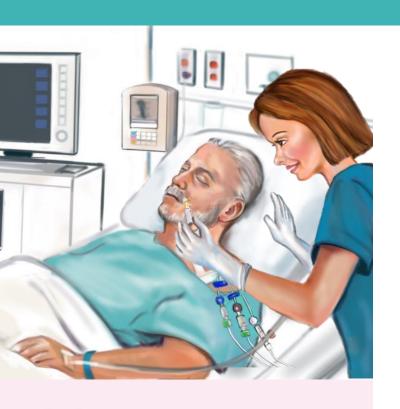
Estimated Avoidable HAIs & LOS

| Business Case 2020 - 2024 | | | | | | |
|---|-------------|--|--|--|--|--|
| 18 avoided CLABSI infections (\$48,108 each est.) ¹ | \$865,944 | | | | | |
| 9 avoided MRSA Lab ID Bacteremia infections (\$23,579 each est.) ² | \$212,211 | | | | | |
| 37 avoided SSI infections (\$28,219 each est.) 1 | \$1,044,103 | | | | | |
| Total Avoided Treatment Cost | \$2,122,258 | | | | | |
| Product Cost | - \$399,284 | | | | | |
| Overall Savings | \$1,722,974 | | | | | |

| Potential Gained Revenue Excess LOS Days Avoided | |
|--|-------------|
| CLABSI 136 LOS Days avoided ³ | \$852,153 |
| SSI 359 LOS Days avoided ⁴ | \$2,253,447 |
| MRSA 90 LOS Days avoided ² | \$565,088 |
| Total Potential Gained Revenue Excess LOS Days Avoided | \$3,670,688 |

¹AHRQ. Estimating the additional hospital inpatient cost and @https://www.ahrq.gov/hai/pfp/haccost2017-results.html. mortality associated with selected hospital-acquired conditions . 2017, Retrieved, 3/1/2023 ² Kengo et al , CID, 69:12, 15 Dec 2019, Pgs 2112–2118 ³ O'Grady NP.. N Engl J Med. 2023 Sep 21;389(12):1121-1131. ⁴ Ban, et al. Journal of the American College of Surgeons 224(1):p 59-74, January 2017

Celebrate Success!



Monument
Health
Success

Patient Safety

- Reduce HAIs
- Improved Patient and Staff Satisfaction
- >90% Compliance
- Product Acceptance

Cost Reduction

Operational Efficiency and Gained Revenue

- Discontinued Screen and Isolate
- Reduced LOS
- Improved Throughput

MH Rapid City

| Outcome | % Reduction | P Value | | | √•√• ✓ |
|----------------|--------------|---------|--|------------|---------------|
| CLABSI ICU | 100% | .01 | | 5 X | XX |
| CLABSI NON-ICU | 90% | .04 | | | |
| SSI | 38% | .003 | | | |
| MRSA Lab ID | 49% | .082 | | | |
| The Journ | ney Continue | 2S | | | |
| | | | | | |

Sustainable Change

WE ARE BETTER TOGETHER



Keys to Successful Change

- A shared need of the people
- Time: Go Slow to Go Fast
- Planning/Structure: clear definition of change/ project
- Shaping a vision: identify full value to patient & facility
- People: influencers, decision makers; champions; frontline
- **Staff:** coaches
- Monitoring: data; observation & feedback
- Systems and supplies: to make it happen



Passionate, proactive Teams with a clear vision and a plan, succeed.

" None of us is as smart as all of us ." Ken Blanchard

QUESTIONS?

Connie.steed@outlook.com

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Arden, S. (2019). Does Universal Nasal Decolonization with an Alcohol-Based Nasal Antiseptic Reduce Infection Risk and Cost? Open Forum Infectious Diseases, 6(S2), S268 https://doi.org/10.1093/ofid/ofz360.636

Belyn, A. Understanding the Kubler-Ross Change Curve. 2022. Retrieved May 12, 2023 @ Understanding the Kubler-Ross Change Curve.

Bostian PA, Vaida J, Brooks WC, Chaharbakhshi E, Dietz MJ, Klein AE, Murphy TR, Frye BM, Lindsey BA. A Novel Protocol for Nasal Decolonization Using Prolonged Application of an Alcohol-Based Nasal Antiseptic Reduces Surgical Site Infections in Total Joint Arthroplasty Patients: A Retrospective Cohort Study. Surg Infect (Larchmt). 2023 Sep;24(7):651-656. doi: 10.1089/sur.2022.344.

CDC Division of Healthcare quality Promotion. Strategies to prevent hospital-onset *Staphylococcus aureus* Bloodstream infections in Acute Care Hospitals. Retrieved February 20, 2024@Strategies to Prevent S. aureus BSIs in Acute Care Facilities | CDC.

CDC. 2022 National and State Healthcare-Associated Infections Progress Report.2023. Retrieved December 12, 2023 @ https://www.cdc.gov/hai/data/portal/progress-report.html.

CDC. Current HAI Progress Report. 2023. Retrieved March 10, 2004 @Current HAI Progress Report | HAI | CDC.

Conner D, Patterson R. Building Commitment to Organizational Change. Training and Development Journal. 1982 Apr; (Vol 36)n4: 18-20. doi:10.1177/0021886315603123.

Corne P, Marchandin H, Jonquet O, Campos J, Bañuls AL. Molecular evidence that nasal carriage of Staphylococcus aureus plays a role in respiratory tract infections of critically ill patients. *J Clin Microbiol*. 2005 Jul;43(7):3491-3. doi: 10.1128/JCM.43.7.3491-3493.2005.

Definitive Healthcare. Excess LOS avoided x census x net revenue per patient day. (2023) Definitive Healthcare https://www.definitivehc.com/definitive-id \$7,500 (calculated for Monument health).

Feldman K. GE Change Acceleration Process (CAPP). 2023. Retrieved March 26, 2024 @How CAP Can Revolutionize Your Organization's Change Management - isixsigma.com.

Franklin, S. (2020). A safer, less costly SSI prevention protocol—Universal versus targeted preoperative decolonization. American Journal of Infection Control, 48(12), 1501 1503. https://doi.org/10.1016/j.ajic.2020.02.012.

Glück U, Gebbers JO. The nose as bacterial reservoir: important differences between the vestibule and cavity. *Laryngoscope*. 2000 Mar;110(3 Pt 1):426-8. doi: 10.1097/00005537-200003000-00019.

Gnass, S. (2020). Improving outcomes with revised preoperative universal decolonization protocol. Open Forum Infectious Diseases. 7(S1), S479 https://doi.org/10.1093/ofid/ofaa439.1076
https://doi.org/10.1093/ofid/ofaa439.1076

Helm RE, Klausner JD, et al. Accepted but unacceptable: peripheral IV catheter failure. J Infus Nurs. 2015 May-Jun;38(3):189-203. doi: 10.1097/NAN.0000000000000100.

Hogan S, Zapotoczna M, Stevens NT, Humphreys H, O'Gara JP, O'Neill E. In Vitro Approach for Identification of the Most Effective Agents for Antimicrobial Lock Therapy in the Treatment of Intravascular Catheter-Related Infections Caused by Staphylococcus aureus. *Antimicrob Agents Chemother*. 2016 Apr 22;60(5):2923-31. doi: 10.1128/AAC.02885-15. PMID: 26926633; PMCID: PMC4862522.

Hoffmann KK, Steed CJ, Kremelberg D, Wenzel RP. The efficacy of an alcohol-based nasal antiseptic versus mupirocin or iodophor for preventing surgical site infections: A meta-analysis. Am J Infect Control. 2024 Oct;52(10):1202-1208. doi: 10.1016/j.ajic.2024.07.003. Epub 2024 Jul 8. PMID: 38986954.

Human Microbiome Project Consortium. Structure, function and diversity of the healthy human microbiome. *Nature*. 2012 Jun 13;486(7402):207-14. doi: 10.1038/nature11234.

ISIXSIGMA.2023. Retrieved March 18, 2024 @ How CAP Can Revolutionize Your Organization's Change Management - isixsigma.com.

Jimenez, A., Sposato, K., De Leon Sanchez, A., Williams, R., & Francois, R. (2019). Reduction of Hospital-Onset Methicillin-Resistant Staphylococcus aureus (MRSA) Bacteremia in an Acute Care Hospital: Impact of Bundles and Universal Decolonization. Open Forum Infectious Diseases, 6(S2), S268. https://doi.org/10.1093/ofid/ofz360.635.

Jones-Schenk J. 70% Failure Rate: An Imperative for Better Change Management. J Contin Educ Nurs. 2019 Apr 1;50(4):148-149. doi: 10.3928/00220124-20190319-03.

Kalmeijer MD, van Nieuwland-Bollen E, Bogaers-Hofman D, de Baere GA. Nasal carriage of Staphylococcus aureus is a major risk factor for surgical-site infections in orthopedic surgery. *Infect Control Hosp Epidemiol.* 2000 May;21(5):319-23. doi: 10.1086/501763.

Lang, Johannes. Clinical Anatomy of the Nose, Nasal Cavity, and Paranasal Sinuses. Translated by M.M. Stell. Thieme Medical Publishers, Inc., New York. ISBN 0-86577-330-0. (1989)

Lastinger L, Alvarez C, et al. Continued increases in the incidence of healthcare-associated infection (HAI) during the second year of the coronavirus disease 2019 (COVID-19) pandemic. *Infection Control & Hospital Epidemiology*. 2022; 1-5.doi:10.1017/ice.2022.116.

Lim WS. Pneumonia—Overview. Encyclopedia of Respiratory Medicine. 2022:185–97. Epub 2021 Sep 17. PMCID: PMC7241411. doi: 10.1016/B978-0-12-801238-3.11636-8.

Lina G, Boutite F, Tristan A, Bes M, Etienne J, Vandenesch F. Bacterial competition for human nasal cavity colonization: role of Staphylococcal agr alleles. *Appl Environ Microbiol*. 2003 Jan;69(1):18-23. DOI: 10.1128/AEM.69.1.18-23.2003.

Mermel LA, Cartony JM, Covington P, Maxey G, Morse D. Methicillin-resistant Staphylococcus aureus colonization at different body sites: a prospective, quantitative analysis. *J Clin Microbiol*. 2011 Mar;49(3):1119-21. Epub 2011 Jan 5. doi: 10.1128/JCM.02601-10.

Mohammadi MM, Poursaberi R, Salahshoor MR. Evaluating the adoption of evidence-based practice using Rogers's diffusion of innovation theory: a model testing study. *Health Promot Perspect*. 2018 Jan 7;8(1):25-32. doi: 10.15171/hpp.2018.03.

O'Grady NP. Prevention of Central Line-Associated Bloodstream Infections. N Engl J Med. 2023 Sep 21;389(12):1121-1131. doi: 10.1056/NEJMra2213296.

Popovich KJ, Aureden K, Ham DC, Harris AD, Hessels AJ, Huang SS, Maragakis LL, Milstone AM, Moody J, Yokoe D, Calfee DP. SHEA/IDSA/APIC Practice Recommendation: Strategies to prevent methicillin-resistant *Staphylococcus aureus* transmission and infection in acute-care hospitals: 2022 Update. *Infect Control Hosp Epidemiol*. 2023 Jul;44(7):1039-1067. Epub 2023 Jun 29. doi: 10.1017/ice.2023.102.

Reeves, L., Barton, L., Williams, J., Don Guimera, Williams, B., Hysmith, N., & Morton, J. (2020). Effectiveness of an Alcohol-Based Nasal Antiseptic in Reducing MRSA Bacteremia in an Adult Intensive Care Population. Infection Control & Hospital Epidemiology, 41(S1), s206. https://doi.org/10.1017/ice.2020.748.

Rindfleisch, J. A, Burnout and Resilience, FAQs, 2017. Retrieved 9-21-224 @Burnout and Resilience: Frequently Asked Questions - Whole Health Library (va.gov)

Ripa M, Morata L, Rodríguez-Núñez O, et al. Short-Term Peripheral Venous Catheter-Related Bloodstream Infections: Evidence for Increasing Prevalence of Gram-Negative Microorganisms from a 25-Year Prospective Observational Study. *Antimicrob Agents Chemother*. 2018 Oct 24;62(11):e00892-18. doi: 10.1128/AAC.00892-18.

Rogers, E. (2003). Diffusion of Innovations, 5th Edition (5th ed.). Free Press. Retrieved May 12, 2023 from https://www.perlego.com/book/780731/diffusion-of-innovations-5th-edition-pdf (Original work published 2003).

Schroeder, J., Schieffelin, J., Marney, E. Effects of Decolonization Protocols in Pediatric Critical Care Populations. American Journal of Infection Control, Volume 51, Issue 7, S14 DOI: https://doi.org/10.1016/j.ajic.2023.04.153.

Sobiesk JL, Munakomi S. Anatomy, Head and Neck, Nasal Cavity. 2023 Jul 24. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan—. PMID: 31334952.

Stanton C. Guideline for preoperative patient skin antisepsis. AORN J. 2021 Apr;113(4):P5-P7. doi: 10.1002/aorn.13380.

Stewart S, Robertson C, Pan J, Kennedy S, Haahr L, Manoukian S, Mason H, Kavanagh K, Graves N, Dancer SJ, Cook B, Reilly J. Impact of healthcare-associated infection on length of stay. J Hosp Infect. 2021 Aug;114:23-31. doi: 10.1016/j.jhin.2021.02.026.

Timsit JF, Esaied W, Neuville M, Bouadma L, Mourvllier B. Update on ventilator-associated pneumonia. F1000Res. 2017 Nov 29;6:2061. doi: 10.12688/f1000research.

Von Eiff C, Becker K, Machka K, Stammer H, Peters G. Nasal carriage as a source of Staphylococcus aureus bacteremia. Study Group. *N Engl J Med*. 2001 Jan 4;344(1):11-6. doi: 10.1056/NEJM200101043440102.

Weiner-Lastinger LM, Abner S, et al. Antimicrobial-resistant pathogens associated with adult healthcare-associated infections: Summary of data reported to the National Healthcare Safety Network, 2015-2017. *Infect Control Hosp Epidemiol*. 2020 Jan;41(1):1-18. doi: 10.1017/ice.2019.296.

Wertheim HF, Vos MC, Ott A, van Belkum A, Voss A, Kluytmans JA, van Keulen PH, Vandenbroucke-Grauls CM, Meester MH, Verbrugh HA. Risk and outcome of nosocomial Staphylococcus aureus bacteraemia in nasal carriers versus non-carriers. *Lancet*. 2004 Aug 21-27;364(9435):703-5. doi: 10.1016/S0140-6736(04)16897-9.

White T, Zalusky-Kamm L. APIC Breakfast Symposium: Getting to Zero: Mission impossible to mission completed. 2023. 2023 APIC conference, Orlando; Global life Tech Corp.

Yan M, Pamp SJ, Fukuyama J, Hwang PH, Cho DY, Holmes S, Relman DA. Nasal microenvironments and interspecific interactions influence nasal microbiota complexity and S. aureus carriage. *Cell Host Microbe*. 2013 Dec 11;14(6):631-40. doi: 10.1016/j.chom.2013.11.005.