



# LEVERAGING DATA TO ENSURE POINT-OF-USE TREATMENT COMPLIANCE

PRESENTED BY

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HACKS TO REDUCE YOUR BIOBURDEN  
ERRORS BY HOLDING YOUR PARTNERS  
ACCOUNTABLE for P. OUT. using data as  
your best friend

# What is “The Conversation???”

DO YOU WANT TO IMPROVE YOUR DEPARTMENT'S IMAGE AND REPUTATION??? CHANCE WILL NOT COME BY DOING THE SAME THING YOU ARE ALREADY DOING!! THIS IS CALLED ACTIVISM





# CURRENT SPDKPI REPORTING PATTERNS: PROCESS vs. OUTCOME MEASURES

People don't care how much you know, until they know how much you care. – *Theodore Roosevelt*

Center for Improvement in Healthcare Quality (**CIHQ**)  
definitions:

**Outcome Measures** are the end results of quality improvement opportunities.

**Process Measures** include all or specific steps of a process to achieve a desired outcome.

**ADDING PROCESS MEASURES TO THE COMMUNICATION  
CYCLE INCREASES THE APPRECIATION/COOPERATION  
YOU GET FROM YOUR CUSTOMERS!!!**

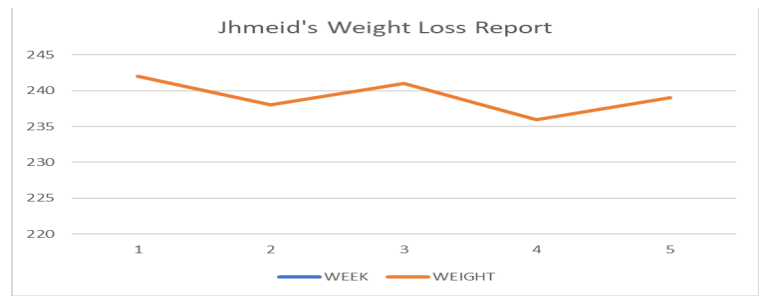


PROCESS vs. OUTCOME  
MEASURES: A practical  
explanation

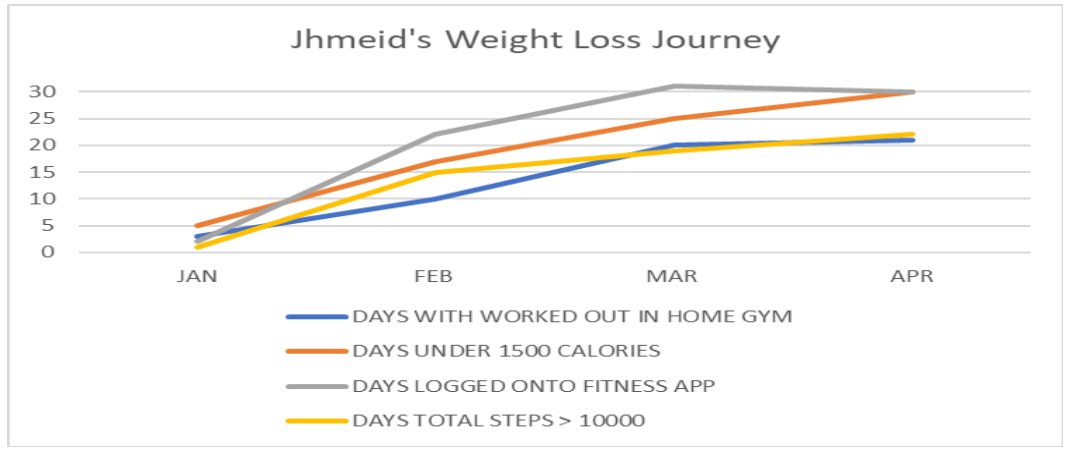
BEFORE



**Outcome Measures:** Jhmeid needs to lose weight. His reports to the O.R. just document his actual weight.



**Process Measures:** Adding the steps that it takes to lose the weight makes it more likely to happen and conveys a deeper level of commitment. These measures should **"MATCH."**



# Review of Quality in Sterile Processing

**qual·i·ty** noun: 1. the standard of something as measured against other things of a similar kind; the degree of excellence of something.

**Quality in Sterile Processing** is of utmost importance to ensure patient safety and prevent healthcare-associated infections.

## **Quality Culture Actions<sup>1</sup>:**

- Preemptively checking high error trays and processes
- Quality Control Checking of Equipment, Personnel, and Workflows
- Feedback with team on opportunities for improvement
- Documentation, Tracking and Reporting of Errors and Process Changes
- Two-way accountability with Customers and Closure of Gaps in Communication
- Use of Data for Continuous Improvement

# **CUSTOMER'S PERCEPTION OF SPD QUALITY OPPORTUNITIES vs. REALITY**

## **Wrong Instruments in Tray**

**Broken  
Instruments**



**Bioburden**

**Missing Instruments**

# ACTUAL SPD ERRORS

**1** Missing Instruments 18%

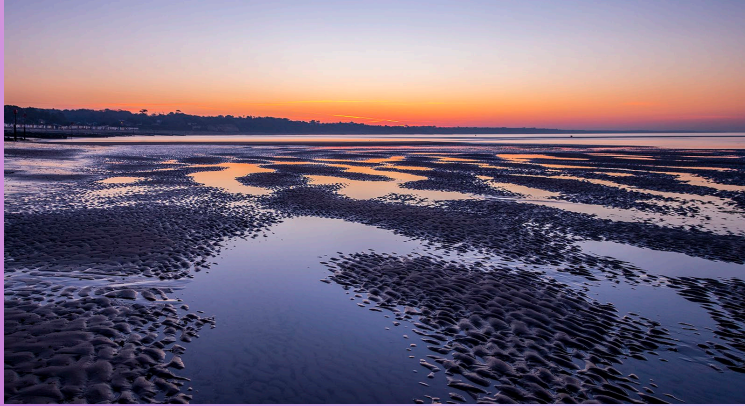
**2** Broken Instruments 11%

**3** Improper Decontamination (Bioburden) 10%

**4** Wrong Instruments in Tray 9%



# WHY CONNECTING P.O.U.T. & BIOBURDEN IS IMPORTANT



- The O.R. and Surgeon's perceptions can rise and fall based on the last product they received.
- The O.R. and Surgeons lack the training to properly categorize errors, so Bioburden sticks out because of the **VISUAL IMPACT** and the guaranteed tear down of the case.
- Sharing the opportunity and rating P.O.U.T. is the best way to improve our overall Quality and control "**The Conversation!**"



# Defining Point of Use Treatment (P.O.U.T.)

**Point-of-Use Treatment (P.O.U.T.)** refers to the removal of gross soil from a device periodically during the procedure and immediately after use, prior to transport to the area in which instruments are cleaned and decontaminated.

It is **NOT** clinicians doing SPD's job

It is **NOT** just spraying instruments

It is **NOT** something that starts after the patient exits the procedure area

It **IS** important to keep the instruments ready for the next step during a case

It **IS** important to ensure proper function of instruments and to prevent the breakdown of the passivation layer of instruments

It **INCLUDES** intraoperative flushing, bioburden, and debris removal and post procedure disassembly and spraying or other method of moisture retention.

The **MOST** important reason for P.O.U.T. is to prevent formation of BIOFILM (a hard to break matrix of microorganisms that adhere to each other and surgical instruments).

# National Standards for P.O.U. compliance



***AST Guidelines for Best Practices for Breaking Down the Sterile Field:*** The principles of “point-of-use (POU) decontamination” of instruments should be applied by the CST...blood and body fluids that are allowed to dry on instruments are difficult to remove versus when they are kept moist...During the surgical procedure the CST should try to keep instruments as free of gross soil as possible by wiping with a sterile-water moistened sponge.



***AORN Guidelines for Perioperative Practice: Instrument Cleaning:*** III.a. Preparation for decontamination of instruments should begin at the point of use. Moistening and removing gross soil at the point of use can help prevent organic material and debris from drying on instruments. Organic material and debris are more difficult to remove from surgical instruments when they are allowed to dry. Removal of organic material and debris at the point of use can improve the efficacy and effectiveness of cleaning and decontamination.

III.b. Instruments should be kept free of gross soil during the procedure.



***AAMI ST79: 6.3.1 Handling of instruments during surgical procedure***

Throughout the surgical or invasive procedure,

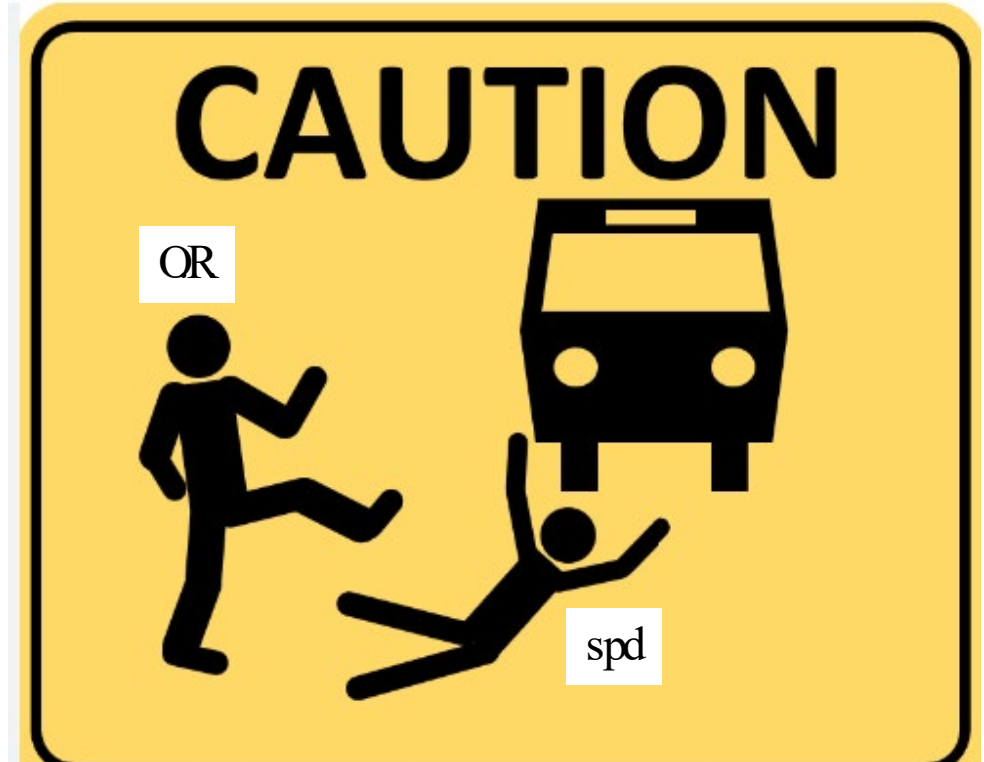
- a) instruments should be wiped, as needed, with sterile moistened surgical sponges to remove gross soil



***APIC Implementation Guide: Infection Preventionist Guide to the O.R.:*** To prevent biofilm formation, preparation for decontamination of instruments should begin at the point of use. Point-of-use preparation for decontamination can be accomplished by removing gross soil, flushing or suctioning lumens, and immersion of instruments in sterile water. During the procedure, the scrub person should remove gross soil from instruments by wiping the surfaces with a sterile surgical sponge moistened with sterile water. Instruments that cannot be cleaned immediately should be treated with an instrument cleaner according to the device and the instrument cleaner manufacturers' written IFU.

# Why does it feel like your OR partners are throwing you under the bus?

- Pressure to do more cases with less staff
- Lack of knowledge about SPD process
- No sense of camaraderie with SPD
- Lack of accountability for their part in the Instrument Cycle



# TOP 5 DISTRACTIONS FOR SURGEONS

**O.R. Issues**



**Auditory Distractions** (Non Clinical Conversations, Interruptions for expected knowledge/skills, Music, Alarms, External Phone Calls)



**Surgical Equipment Issues** (Tray Errors, Bioburden, Holes, Trays not ready at the start of case)

**SPD  
Issues**



**Environmental Distractions** (O.R. Staff unavailability, Poor ergonomics, Case Booking/Picklists)



**Communication** (Clinical conversations, Consultation)



**Visual Distractions** (Door Opening, Room Traffic, Personnel Changes)

# How to Catch Bioburden







# CALCULATING KPIs: PROPER ERROR RATES

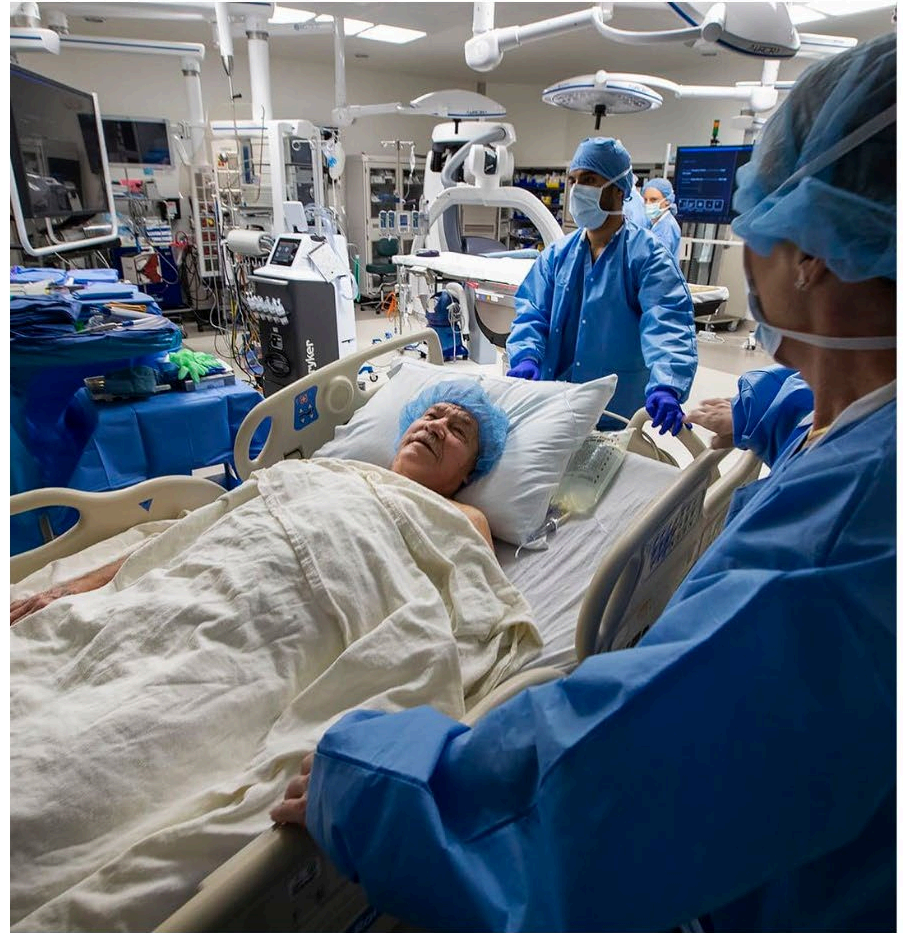
When calculating the Error or IUSS rates, the numerator (top number) is the errors and the denominator (bottom number) is the number of cases that day, not the total instruments processed. This is the only way to generate numbers that make sense to your customers and to produce numbers that CS staff can target for improvement.

Error Rate Calculation Formula:

$$\frac{\text{ERRORS}}{\text{CASES SCHEDULED THAT REPORTING PERIOD}} = \text{ERROR RATE}$$

# OR Barriers to Compliance

- The O.R. will often complain that they cannot complete P.O.U.T. because of the pressure to turn over rooms... **WE AGREE!!!**
- The overwhelming guidance is the P.O.U.T. is a continuous process throughout the case.

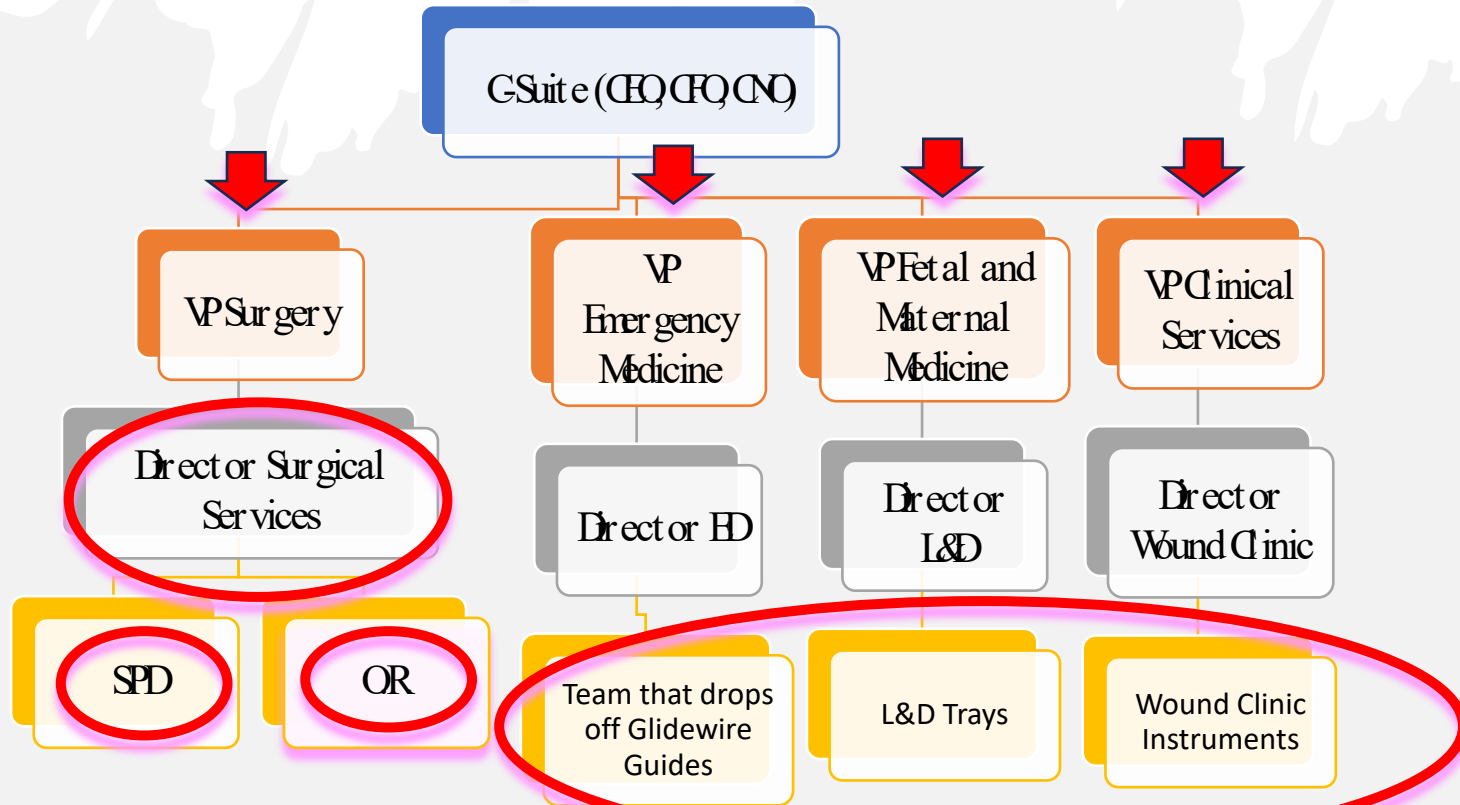


## Do Not Forget your Ancillary Clinics

P.O.U.T. is even **more**  
important for  
Ancillary Clinics  
**because of the time**  
**between the**  
**procedure and the**  
**delivery** to  
Decontamination.



# Typical Hospital Hierarchy



# PRIORITIES OF AN OUTPATIENT CLINIC OR DEPARTMENT



## Patient Safety

Ensuring patient safety is the top priority for the clinic



## Customer Service

Providing a comfortable environment for patients is essential



## Patient Education and Scheduling



**Departmental Cleanliness** and Room Turnover, Patient Throughput



**Surgical Instrument** Turnover and Maintenance



# Barriers to P.O.U.T. Compliance for Ancillary Clinics

- Lack of training on the importance of P.O.U.T.
- Lack of proper supplies and transport devices
- Distrust of the entire process
- Lack of Sterilization SME Oversight







Connecting P.OUT  
Compliance Rate to  
Customer Perception of  
Quality

# CONNECTING SPD AND CUSTOMERS USING KPIs

Peter Drucker, the Father of Modern American Business, said, **“In order for something to be improved, that thing must be able to be measured.”**



# HOW TO GET BUY IN FROM THE STAFF AND CUSTOMERS USING KPIS

## *What's the Score?*

1. LITTLE LEAGUE GAME EFFECT: STAFF DOES NOT KNOW THE SCORE
2. STAFF DOES NOT HAVE AS MUCH SKIN IN THE GAME AS MANAGEMENT
3. SURGEONS (WHO CONTACT THE C-SUITE DIRECTLY) ONLY REMEMBER THE "BAD STUFF" **YELP EFFECT**





# THE NUMBERS BEYOND JUST P.O.U.T. COMPLIANCE %

PROCESS MEASURES THAT SUPPORT THE OUTCOME MEASURE



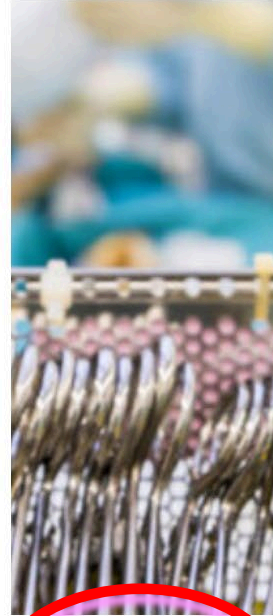
P.O.U.T.  
Compliance



Time between  
Case End & Decon  
Receiving



Cement on Tray  
Data



Proactive vs.  
Reactive Quality  
Results

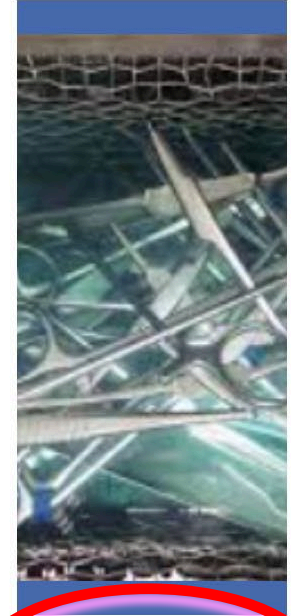
SSI are considered  
the most frequent  
complication in  
surgical patients,  
being responsible for  
**38%**  
of all infections<sup>3</sup>



Most SSI are caused by  
*Staphylococcus aureus*<sup>2</sup>

mortality rate of 3%,  
deaths are directly

SSI Rate



Ultrasonic %

# Key Performance Indicators (KPIs) that support P.OUT improvement



- POUT Compliance %
- Time between procedure end and Decon Receiving
- Count of Trays with Cement on the them
- Reactive Error Rate
- Proactive Tray Audit Count
- Proactive Error Rate
- Ultrasonic % (for SPD Staff)
- SSI Rate



# PREWORK FOR CUSTOMERS

## OR

- Introduce the concept like it is new
- Find a Champion in the O.R.
- Educate O.R. at staff meeting
- Ensure facility approved spray is available with a storage spot
- Review the Metrics you will be sharing

## ANCILLARY CUSTOMERS

- Partner with Infection Prevention before you roll this out
- Introduce the concept like it is new
- Ensure facility approved spray is available with a storage spot
- Ensure (sometimes you will have to buy) that
- Review the Metrics you will be sharing

# PREWORK FOR SPD

## WITH ITS

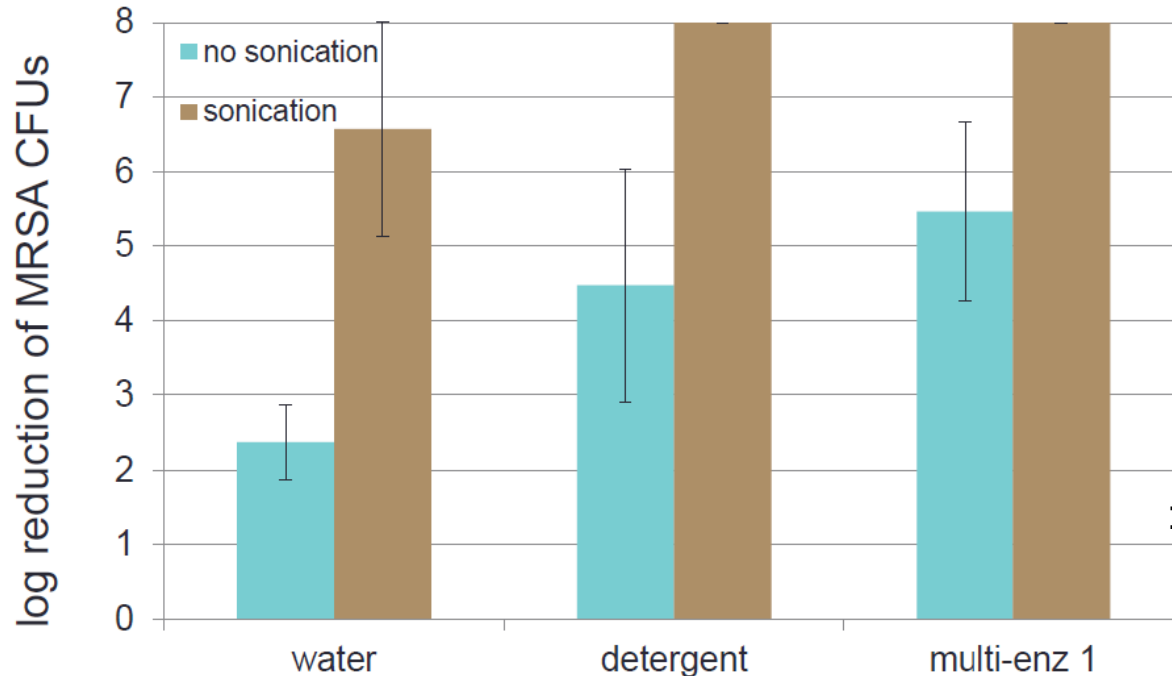
- Produce an Ultrasonic (all or nothing) protocol
- Educate staff on importance of Ultrasonic for high Bioburden trays
- Ensure Ultrasonic is set the correct amount of time
- Educate staff on importance of documenting P.O.U.T. Compliance
- Educate on the importance of choosing the correct Washer Cycle
- Set up Decon Receiving in ITS to force a rating and a reason for each Case Cart
- Share results daily at huddle to start
- Move to weekly when it is hardwired
- **Stop relying on “gross out” pics**

## WITHOUT ITS

- Produce an Ultrasonic (all or nothing) protocol
- Educate staff on importance of Ultrasonic for high Bioburden trays
- Ensure Ultrasonic is set the correct amount of time
- Educate staff on importance of documenting P.O.U.T. Compliance
- Educate on the importance of choosing the correct Washer Cycle
- Use a simple sheet to track noncompliant Case Carts
- Share results daily at huddle to start
- Move to weekly when it is hardwired
- **Stop relying on “gross out” pics**

# Study on the effectiveness of Ultrasonics<sup>7</sup>

**Sonication** results in a significant increase in bactericidal activity against MRSA by a multi-enzymatic cleaner

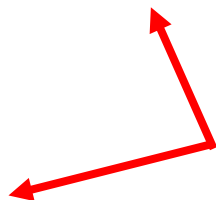


**SPD Teams** underestimate the science of Ultrasonics. **SPD Leaders** do not make it easy to identify which items need to go to the sonic.

# EXAMPLE OF A MANUAL LOG FOR TRACKING P. OUT

DATE	CASE CART #	RM	CS	TOTAL CASES THIS DATE	SURGICAL SPECIALTY	ISSUE(s)

- 1 = Gross Bioburden (no attempt to remove Biofilm)
- 2 = Case Cart loaded improperly (heavy instruments on top, cords compressed, etc.)
- 3 = Endomechanicals or Sharps in Tray
- 4 = Instruments NOT prepped for transport with moisture retaining product
- 5 = Instruments not disassembled or disposable items attached to instruments



Available via email

Adding a “Key” at the bottom makes documentation easier for Decon Staff

# MAXIMIZING COUNT SHEETS AND CONTROLLING THE NARRATIVE

One of the biggest mistakes that we make as SPD Professionals is losing control of the narrative. The best way to take this back is to follow **the National Pharmacy Model<sup>8</sup>** and Categorize Errors:

**Category I:** Delays or Cancels a Case (Bioburden, Tray not Sterile, No CI in tray etc.)

**Category II:** Interrupts Care (Missing Instrument not marked)

**Category III:** Shared or Unassigned Errors (Tray not on picklist unavailable, Holes in tray, Filter fell into tray)

INSTRUMENT COUNTSHEET

PT. NO. ....

ID	TRAY	C.S. SET	CIRC				
DATE	ASSEMBLED BY:		SCRUB				
QTY	CATALOG NO.	VENDOR	INSTRUMENT DESCRIPTION	SPD	1 <sup>ST</sup> COUNT	ADDED	2 <sup>ND</sup> COUNT
2		REBSTOCK	B.P. HANDLE NO.4				
1			SCBS OR STRAIGHT (MAYO)				
2			SCBS OR CURVE (MAYO)				
2			TOOTH FORCEP				
2			NON TOOTH FORCEP				
4			KELLY CURVE (ARTERY)				
8			ARTERY CURVE (MEDIUM)				
4			KOCHER ST. FORCEP				
3			NEEDLE HOLDER (MAYO)				
4			ALLIS FORCEP				
4			SPONGE HOLDER				
1			DOYEN RETRACTOR				
2			RICHARDSON RETRACTOR				
4			ARTERY ST.				
4			GREEN ARMYTAGE				
6			TOWEL CLIPS				
1			BOWL				
1			KIDNEY BASIN				
55			TOTAL	SIG			
			GAUZE 10X10	10			
			GAUZE 5X5	10			

STERILIZER TYPE: STEAM DYNAMIC AIR REMOVAL (VACUUM)  
 EXPOSURE TIME: 4 MIN AT 134 DEGREES CENTIGRADE  
 Please return the count sheet to CSSD

CONTAINER SYSTEM

**\*\*\*Propose a system to the Multidisciplinary Team and add to Count Sheets\*\*\***





# Methods that help SUSTAIN QUALITY Improvement Initiatives

- **Partner with I.P.!!!**
- **Round in the spaces that are sending instruments.**
- **Ensure your partners have the supplies they need**
- **Report adverse findings immediately (daily, weekly)**
- **Bring aggregated Data to Multidisciplinary meetings**
- **Bring Data to Facility Infection Control Meetings**
- **Do Not give up when numbers look bad**
- **Report Internal Data to your team**
- **Meet with noncompliant individuals**
- **Make sure your team becomes the toughest receivers of goods in the industry!!!**

# the ups and downs of a P.O.U Reporting Implementation

**Pework/Educ  
ation/Selling  
to SPD Staff**

**Embarrassing  
Numbers**



**Customer  
Frustration with  
Being Called  
Out**

**“Go Live”**

**Staff Frustration  
with Change  
Time**

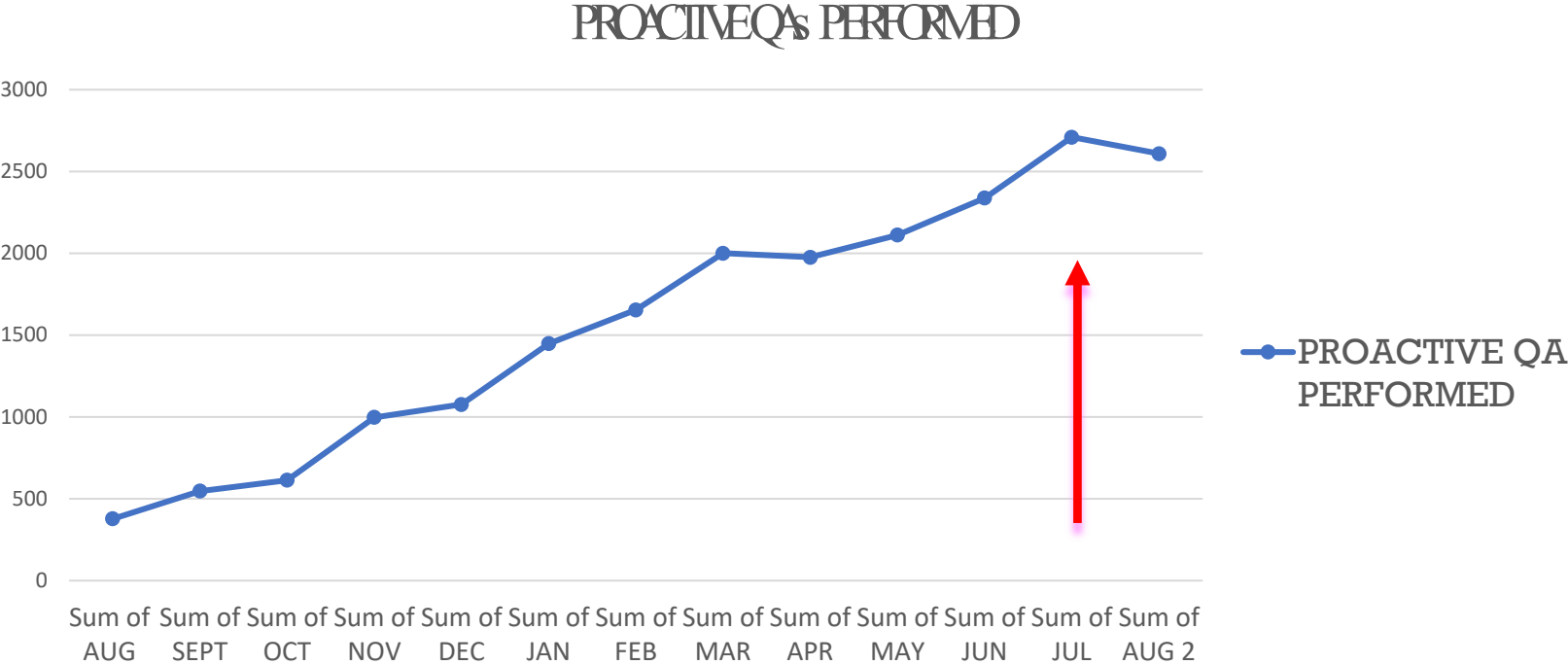
**Sustain Phase**



**Numbers Start  
Improving**

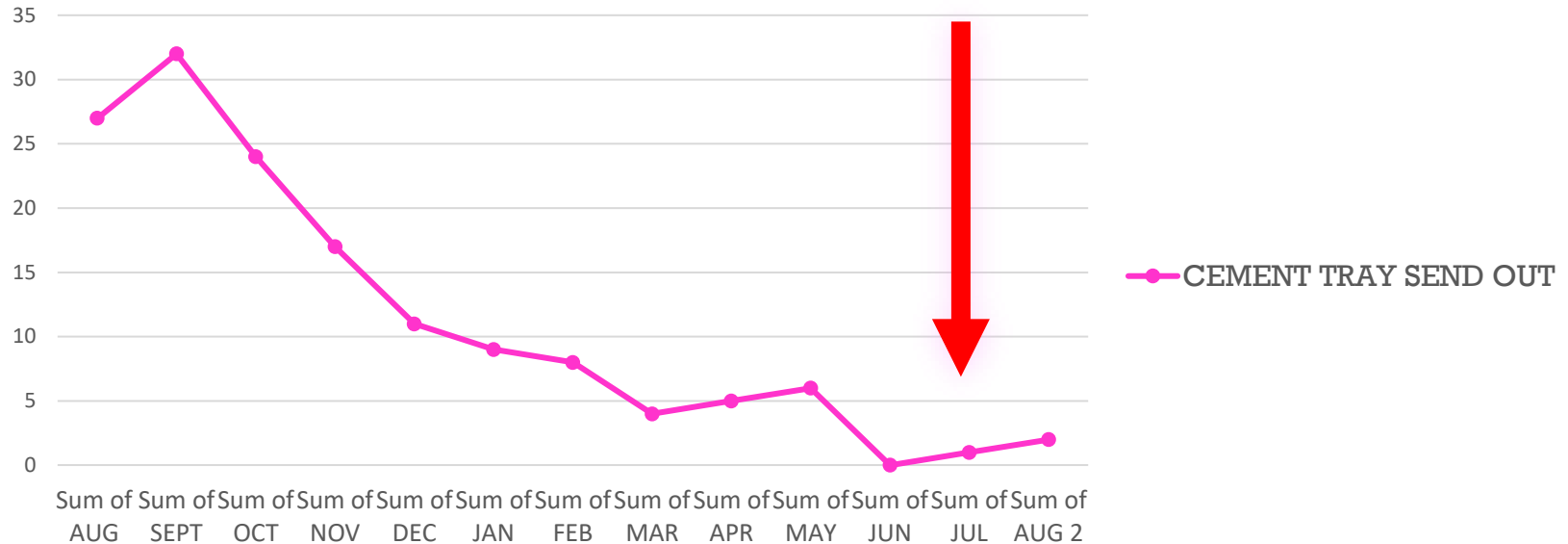
**Rededication  
when  
numbers slip**

# Case Study Supplemental Factors: Proactive QAs performed

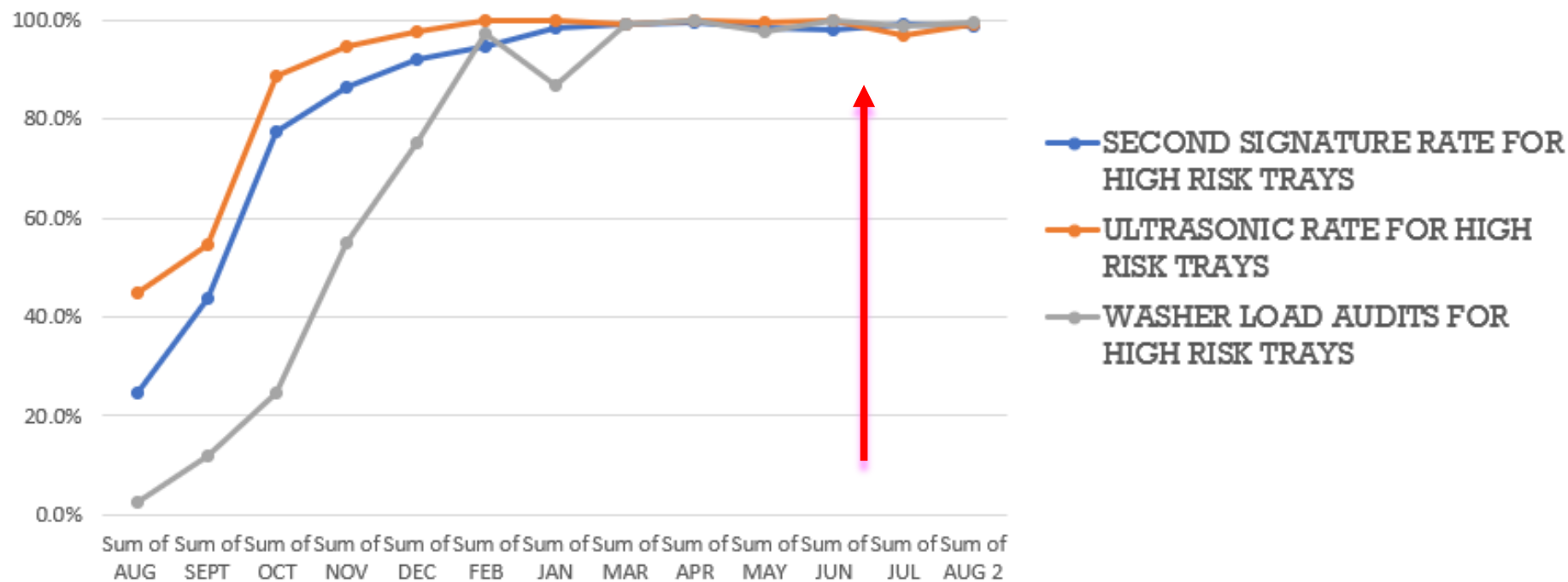


# Case Study Supplemental Factors: Cement Tray Send Outs

## CEMENT TRAY SEND OUT

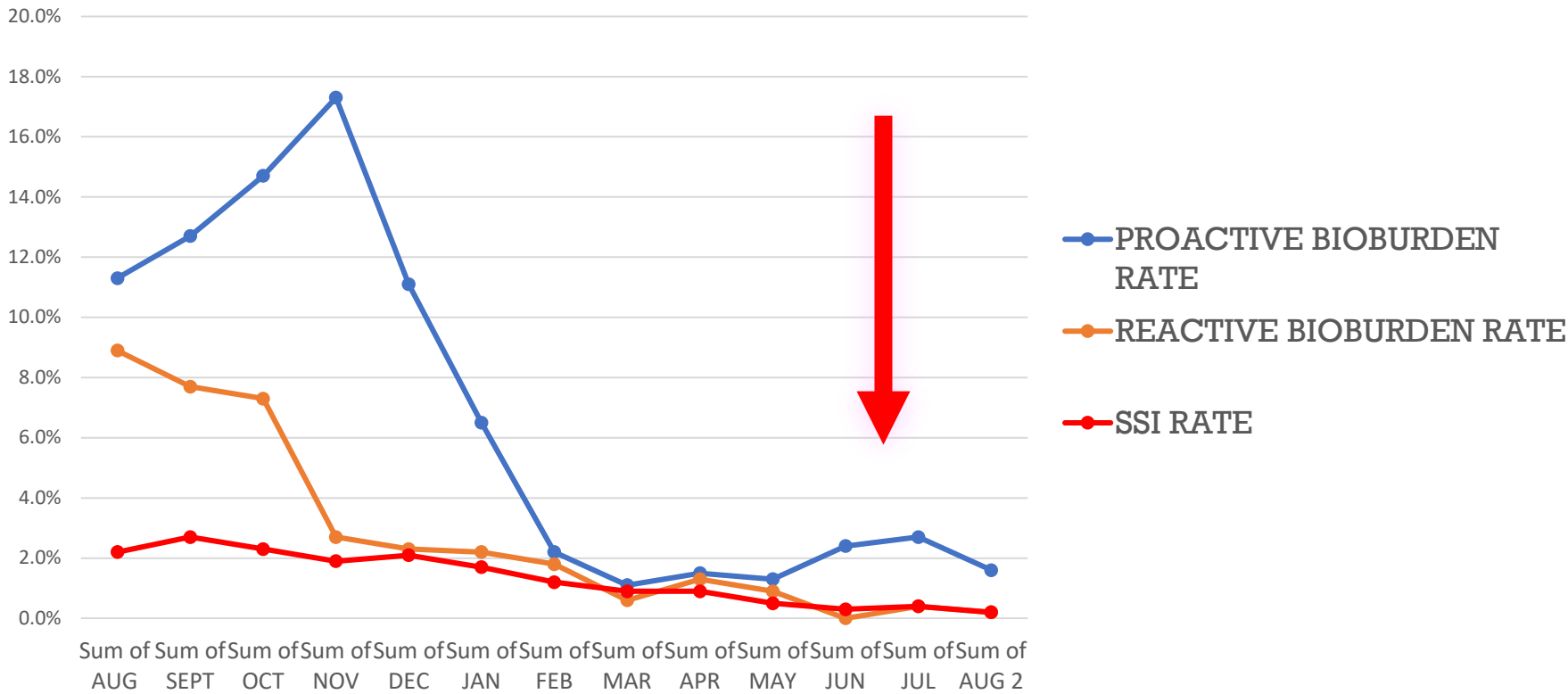


# INTERNAL REPORTS FOR SPD TEAM





# Case Study: P.OUT Tracking Impact FOR CUSTOMERS



# AAMI End Users



AAMI has an “**Observer**” category, which allows you free attendance and participation in committees

The **Advantage Ambassador Program** is a way for end users to build their resumes, network, and participate in the process with guidance from experienced mentors.

# SUMMARY

The rating of point of use (POU) cleaning performance on surgical instruments delivered to decontamination is of paramount importance in ensuring patient safety and the effectiveness of the sterile processing workflow. Preventing Biofilm formation is paramount to ensuring that the next patient has the highest standard of care. **The Decontamination area is too late to “START” this critical process.**

Many regulatory bodies and professional organizations provide evidence-based guidelines and standards for POU cleaning of surgical instruments. Compliance with these guidelines is essential for maintaining quality assurance and meeting accreditation requirements.

Proper P.O.U.T. improves instrument longevity and lowers the risk of Surgical Site Infections (SSIs). Regularly assessing POU cleaning performance allows organization to identify training opportunities. Facilities can also recognize process and infrastructure shortcomings. The most important benefit is that the organization can implement corrective actions, while engaging in Continuous Improvement activities. improving the entire patient to instrument interface.

Documenting P.O.U.T. performance provides a clear record of instrument maintenance and regulatory compliance. That accountability becomes the basis of cooperation throughout the organization.

# Questions and Answers



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# References

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