The Plight of Shared Patient Care Equipment –

Getting More Than You Bargained For

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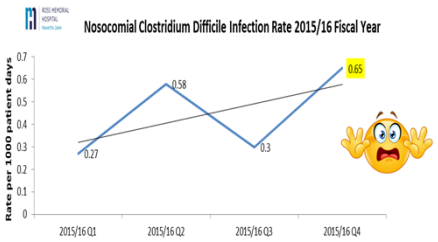
Who Are We?

- I am a CIC credentialed registered nurse , with a passion for infection prevention spanning more than 3 decades.
- Ross Memorial Hospital (RMH) is my workplace, an active, medium-sized community hospital with 170 acute care beds.
- A few of our services include: orthopaedic surgery, obstetrics, general medicine, rehab, mental health, and outpatient dialysis.

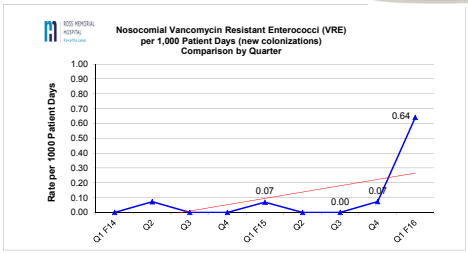
Ross Memorial Hospital

Problem: Rising CDI and VRE nosocomial rates observed hospital-wide in 2015/16; time to re-group and look for process improvements that could make a difference!

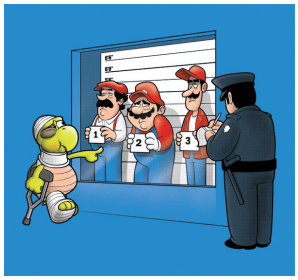


Prevention is the name of the game:

IPAC invited a multidisciplinary team together to share their concerns and discuss ideas for tackling the issue.



The Usual Suspects……..



What travels from patient to patient?

1. Shared patient care equipment
2. Health care provider hands

Don't Ignore the Obvious

Are you monitoring to make sure it's getting done?

Shared patient care equipment audits

Hand Hygiene audits

*Plight: a difficult or distressing situation that is full of problems.

If you answer, "yes we do that" to the following situations, you too may be suffering from the same plight:

- **Who's Responsible** - "it's not my job"
- **Lack of space/budget** - for dedicated bedside equipment
- **Hallway clutter** - minimal storage for clean and dirty equipment
- **"Don't Have Time"** - abandoning dirty equipment in the hallway
- **Is it clean or not?** - no system to identify if the last person cleaned it

*Reference: Collins English Dictionary

"Green means Clean"

All multi-patient use equipment must be disinfected after each use.
Once disinfected with wipes, place a piece of the green tape on the equipment to indicate to everyone that is ready for use, as shown below.

What's Missing?

So if you are not auditing then you must be:

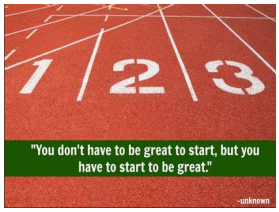
- **Assuming** equipment in the halls or charging base is clean and ready to go to the next patient.
- **Hoping** that the last person who used it, cleaned it.

No more assuming or hoping:
The 'Green Means Clean' initiative started us on the journey of taking out the guess work.

Where To Begin

- **Seek Approval –** present project plan to Senior Team
- **Source/Purchase -** ATP luminometer and swabs
- **Engage frontline stakeholders –** what's in it for them, spark interest in advance at staff huddles and via posters/emails
- **Staff Refresher** – review best practices for cleaning shared equipment, standardize cleaning processes
- **Install/deliver –** distribute green tags/dispensers

Ready, Set, Go



- **Develop program tools**
- **Train auditors**
- **Recruit Support**
- **Monthly Reports**
- **Be flexible**
- **Recognition/Reward**

Two Measures of Compliance

1. ATP Swabs

- rapidly measure actively growing microorganisms through detection of adenosine triphosphate, or ATP
- clean safe zone is **250 or below**
  (on a hard non-porous surface)
- two audits done monthly on 9 units, swabbing five random items of shared patient care equipment per audit.
  (no we don't swab cell phones or charts)

2. Green Tagging Rate

- Green tags were made available, so staff could identify if the previous user had cleaned it.
- If no green tag visible, consider it soiled.

Lessons Learned – Fact or Fiction

1. "If it looks clean, it is clean."
Fiction - auditors commonly found clean looking vital signs machines reading in the *thousands*. (remember <250 is considered clean)

2. Busy staff will stop and gather around the auditor fascinated by the technology.
Fact - instant readings on the ATP luminometer help to link personal practice to outcomes, in real time.

3. People don't always put things where they belong.
Fact - soiled commodes regularly found in clean corrals, soiled infant stethoscopes thrown on clean infant warmers in the nursery, *who put that there*?

4. Healthcare providers are aware of their responsibility to clean what they use.
Fiction – soiled ultra sound machines left in clean utility rooms after physicians perform the test, sadly everyone thought it was someone else's job to clean.

5. If the item is plugged in or sitting on a charging base that means the last person cleaned it.
Fiction - example glucometer on its base, charging on the nursing station desk, reading **26,142** .
The commode was found to be cleaner that day at a reading of 188.

6. Frontline staff may resort to deception to improve compliance rates for their Managers.
Fact – auditors soon realized that green tag counting must be done first before starting ATP swabbing, as the green tags magically multiplied, shortly after arriving on the unit.

Weathering the Storm

- **ATP results can be troubling -** turn it into a positive, strike up a working group to implement change.
- **Perseverance pays off -** high ATP numbers become less frequent over time.
- **Grumbling -** "it wasn't me", expecting the auditor to clean the soiled item found when auditing. Red tags now help to prevent soiled items from 'getting away' to the next patient.
- **Adjusting targets -** changing behavior takes time, don't lose hope! RMH averages 40% green tag compliance even after 3 years, despite setting a 70% target for last year.

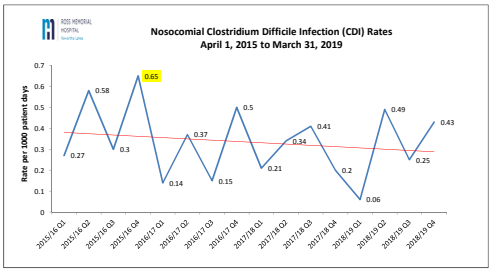
Nosocomial HAI Rates Declining

As our hospital experienced improved levels of cleanliness in shared patient care equipment, there was a corresponding decline in *hospital acquired infections and/or new colonizations.

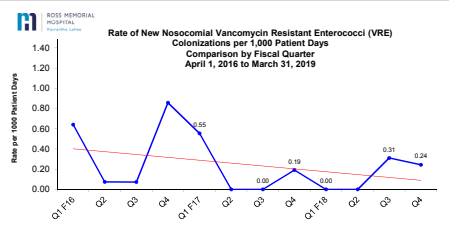
*Based on nosocomial MRSA, VRE, and C. difficile rates per 1000 patient days.

CDI - rates dropped quickly after start of initiative; lowering rates for 3 years.

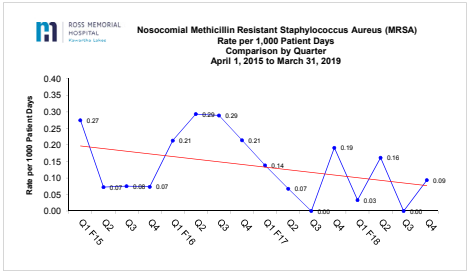
CDI Rate 2015/16 (prior to start of initiative) **0.45 per 1000 patient days.**
End of Year One = 0.29 / Year Two = 0.29 / Year Three = 0.30



VRE - The first year remained a challenge for new colonization's but has since shown a steady decline in the rate, dropping to a third of the starting point.
VRE Rate: Year One = 0.41 / Year Two = 0.19 / Year Three = 0.14



MRSA - declining nosocomial rates observed, despite 2018 high admission rate for treatment of community acquired MRSA bacteremia related to IV drug use.
MRSA Rate: Year One = 0.25 / Year Two = 0.10 / Year Three = 0.07



Did We Get More Than We Bargained For?

We Sure Did!

- ATP audits have provided tangible evidence of performance, giving us an opportunity to correct problems we didn't even know we had.
- A sense of pride in knowing we are doing everything we can to make our hospital a safer place for our precious patients.