

**A Day in the Life: Don't Do It All Yourself!**

Jim Gauthier, MLT, CIC  
Senior Clinical Advisor, Infection Prevention  
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**Disclosure**

\* Jim is employed by Diversey. His expenses to present this webinar (salary) are paid by this company. Diversey has had no input into this presentation from a commercial interest.

**APIC** | 2021 STRATEGIC PARTNER PLUS

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**Disclaimer!**

- \* Jim can speak two infection control languages: American and Canadian
- \* Please pardon the occasional ICP instead of IP, and Routine Practices instead of Standard Precautions!
- \* It is mould, not mold; neighbour not neighbor!
- \* Oh, and that accent!

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**Objectives**

- \* Review the role of an IP
- \* Give you strategies for when it is going downhill, and there are no brakes!
- \* How to involve everyone in helping




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**In the Chat Area: Years of IP and Degree**

- \* <2
- \* 3-5?
- \* 5-10?
- \* OMG?
- \* RN, MLT, MPH?

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**What is an IP?**

- \* Educator / Teacher
- \* Juggler
- \* Need to get the kids to share their toys!
- \* Multi-tasker
- \* Diplomat
- \* Good articles on 'culture' by Borg

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### What are we NOT?

- \* Police
  - \* Dust police
  - \* Hand wash police
  - \* Mold police
- \* Want to be seen as a collaborator or partner in helping to get the best care possible

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### Reporting Structures

- \* In other facilities can be all over the map!
  - Nursing
  - Quality and Risk
  - HR
  - Occupational Health
  - Laboratories

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### What is an IP?

- \* Able to handle interruptions!
- \* Never goes home till the job is done (especially Friday afternoon)




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### While Checking E-mail Friday PM

- \* Construction starts Monday
  - \* 15 work people on site to start demolition of admitting office outside Geriatric Ward
    - \* They can get started 2 weeks earlier than expected!
- \* Need me to check the barriers
- \* Measure the negative pressure
- \* Get that orientation lecture done at 0700!

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### The phone rings, Ward 3a

- \* Sniffles, sneezes, coughs and wheezes
  - \* Been going on since Tuesday!
- \* Not the same people that have been vomiting!
  - \* Since Wednesday!
- \* Managed to find enough staff to cover those that are off with...
  - \* Vomiting and diarrhea

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### And, of course...

- \* The laboratory calls
  - \* Positive CRE admission screen
- \* Patient has been in a 2 bed room for 3 days
  - \* Sorry it took so long to get the isolate, mixed culture, you know!

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**Shameless Self-Promotion**

Jim's presentation on Basic Microbiology is entertaining and available for CEU!  
[www.sdfhc.com/CE](http://www.sdfhc.com/CE)

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**Am I Exaggerating?**

- \* There are days...
- \* Need to prioritize based on risk of disease transmission
- \* What do you address first?

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**How to Prioritize?**

Urgent & Important <i>do it now</i>	Important not urgent <i>decide when to do it</i>
Urgent not important <i>delegate it</i>	Not important not urgent <i>delete it</i>



<https://www.process.st/how-to-prioritize-tasks/>  
<https://ibondale.wordpress.com/2019/06/30/asking-for-help-demonstrates-psychological-safety/>

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**First?**

1. Construction Monday?
2. Ward 3a illnesses?
3. New CRE case?

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**First**

- \* Call Ward 3a, ask for line listing of patients who are ill
- \* Will need to visit ward immediately for more information
  - \* Outbreak Management
    - \* Have a good list (patients and team)!
  - \* Occupational Health
    - \* Need to get a feel for how many staff are truly off




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**Move On To:**

- \* CRE
  - \* Call ward, discuss patient status, make note about follow up cultures, contacts
  - \* Check on soiling risk (diarrhea, urinary catheter, etc.)

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### ... And Lastly

- \* Check that your construction PowerPoint is ready to go
- \* Review plans from sign off meeting
- \* Review contractor ICRA
- \* Leave message for maintenance
  - Remind them of need to give you some lead time!




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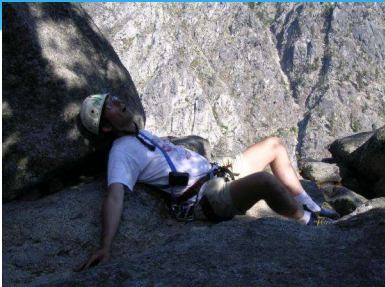
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### Pause!




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### Consider this Thought:

- \* Perfect is the enemy of good (Voltaire ~1600?)
- or
- \* Don't let the perfect get in the way of good!

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**Personal Strategies**

- \* Let's look at:
  - \* Listening
    - \* Sifting and Deflecting
  - \* Keeping track
  - \* Time Robbers



www.coachnancylundy.com

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**Listening – and Sifting!**

- \* Is it your concern?
  - \* Don't get drawn into other area's issues
- \* Can it wait?

Urgent & Important <i>do it now</i>	Important not urgent <i>decide when to do it</i>
Urgent not important <i>delegate it</i>	Not important not urgent <i>delete it</i>

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**Listening – and Sifting!**

- \* Would they e-mail you?
- \* Get both sides of the story:
  - \* Can be rather eye opening!

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**Examples**

Nurse with baseball cap

- \* Not an IC issue... HR can handle this!




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**Examples**

Dead Smell in Office

- \* Call maintenance back!




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**Personal Strategies**

- \* Make notes
  - \* Always travel with paper!
  - \* Use cell phone
- \* Plenty of rest
- \* Fuel:
  - \* Chocolate and caffeine!
- \* Avoid:
  - \* Alcohol in excess!




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**Time Robbers - Meetings**

Do you really need to be there?

- \* Ad hoc or as needed
- \* Want agenda with good time lines

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**Meetings**

Are there meetings you should be at?

- Nursing P&P
- Medical Groups
- Product Evaluation and Standardization (PESC)
  - Supply Chain
- Maintenance and Renovation, Construction Working Group (MARC WG)

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**Time Robbers - Construction**

Becoming more of an issue with TJC, APIC  
 This requires more staff in many cases  
 Facility Guidelines Institute

- \* "Guidelines for design and construction of health care facilities"
- \* 2018

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## Construction

- \* Canadian Standards Association
  - \* Z317.13-17
- \* Local State
- \* APIC
- \* PIDAC Construction
  - \* <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/crmd>




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## Time Sheet

	A	B	C	D	E	F	G
1	Date	Project	Activity	Hours	Contacts	Who	
2	21-May	IT Reno	Inspection	0.5			
3	22-May	IT Reno	Education	1	5	Electrical Contractor	
4	23-May	Flood	Inspection	1.5	4	EVS	
5							
6							
7							
8							
9							
10							

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## Shameless Self-Promotion

Jim's presentation on construction basics was presented in 2020!

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### Time Robbers – E mail

Watch what lists you belong to

- \* I recommend ProMed ([www.promedmail.org](http://www.promedmail.org))
- \* APIC “My APIC”

But they do add to the e-mail



writerunboxed.com

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### E mails

Love the “All e-mail user” ‘spam’

- \* Or the ‘reply to all’!
- \* Learn to use b.c.c. – blind carbon copy




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### Find/Assign a Mentor

- \* We all do this unofficially
  - \* IPAC-Canada has formalized this process
  - \* Certification Board in Infection Control
  - \* Chapter meetings

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**Find Help**

- \* Staff
  - \* Nurses/physicians
  - \* Environmental Services (EVS)
- \* Family/Visitors
- \* Volunteers

# Help Wanted

With Hand Hygiene!

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**Healthcare Associated Infections**

\* **HAI(p) = PA + HH + ASP + CP + FWM + ED**

*Where:*

- \* **HAI(p)** = Healthcare Associated Infection Prevention
- \* **PA** = Patient Acuity
- \* **HH** = Hand Hygiene
- \* **ASP** = Antimicrobial Stewardship Program
- \* **CP** = Clinical Practices
- \* **FWM** = Fecal Waste Management
- \* **ED** = Environmental Disinfection

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**Healthcare Associated Infections**

- \*  $HAI(p) = PA_{vent} + PA_{poe} + PA_{age} + PA_{abtic} + PA_{co-m}$
- \*  $HH_{prod} + HH_{place} + HH_{audit} + HH_{mom} + HH_{champ} + HH_{pat} + HH_{fam/vis}$
- \*  $ASP_{drug} + ASP_{route} + ASP_{duration} + ASP_{dose} + ASP_{restriction}$
- \*  $CP_{skinprep} + CP_{decol} + CP_{prophy} + CP_{bundle}$
- \*  $FWM_{container} + FWM_{ppe} + FWM_{no\ rinse} + FWM_{protocol}$
- \*  $ED_{evs} + ED_{audit} + ED_{nurse} + ED_{other} + ED_{family} + ED_{prod} + ED_{ppe} + ED_{contact} + ED_{dilute} + ED_{compat} + ED_{resource}$

<http://www.diverseydigital.com/natools/videoHub/317485789.php>

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$$\sum_{f1}^{f36} = HAI(P)$$

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### What is Your Priority?

- \* Hand hygiene audits are 'mandatory'
- \* EVS auditing can help ensure a good job is being done
  - \* IP role
  - \* EVS manager role

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### Priority?

<p><b>Urgent &amp; Important</b> <i>do it now</i></p>	<p><b>Important not urgent</b> <i>decide when to do it</i></p>
<p><b>Urgent not important</b> <i>delegate it</i></p>	<p><b>Not important not urgent</b> <i>delete it</i></p>



<https://koondate.wordpress.com/2019/06/30/asking-for-help-demonstrates-psychological-safety/>

<https://www.process.st/how-to-prioritize-tasks/>

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**Hand Hygiene and 36...**

- \*  $HAI(p) = PA_{vent} + PA_{poe} + PA_{age} + PA_{abtic} + PA_{co-m} +$
- \*  $HH_{prod} + HH_{place} + HH_{audit} + HH_{mom} + HH_{champ} + HH_{pat} + HH_{fam/vis} +$
- \*  $ASP_{drug} + ASP_{route} + ASP_{duration} + ASP_{dose} + ASP_{restriction} +$
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 $ED_{contact} + ED_{dilute} + ED_{compat} + ED_{resource}$

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**Hand Hygiene 7 of 36!**

- \*  $HAI(p) = PA_{vent} + PA_{poe} + PA_{age} + PA_{abtic} + PA_{co-m} +$
- \*  $HH_{prod} + HH_{place} + HH_{audit} + HH_{mom} + HH_{champ} + HH_{pat} + HH_{fam/vis} +$
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**EVS and 36...**

- \*  $HAI(p) = PA_{vent} + PA_{poe} + PA_{age} + PA_{abtic} + PA_{co-m} +$
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 $ED_{contact} + ED_{dilute} + ED_{compat} + ED_{resource}$

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## EVS Controls 9 of 36!

- \*  $HAI(p) = PA_{vent} + PA_{poe} + PA_{age} + PA_{abtic} + PA_{co-m}$
- \*  $HH_{prod} + HH_{place} + HH_{audit} + HH_{mom} + HH_{champ} + HH_{pat} + HH_{fam/vis}$
- \*  $ASP_{drug} + ASP_{route} + ASP_{duration} + ASP_{dose} + ASP_{restriction}$
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## Patient Room Entries

- \* Between 5 AM and 8 PM, (ICU and Med/Surg Unit)
  - Number of room entries = 5.5/hour (28 max)
  - Number of different staff entering room = 3.5/hour (18 max)
  - Number of people in room during waking hours
- \* = 15 hrs \* 5.5 /hr = 82.5 people

Table 1. Estimated Room Patient Entries by Patient Population, Relative Staffing, and Unit Type

Patient Population	Estimated Entries		Relative Staffing		Unit Type	
	Adults	Children	Area	Staffing	ICU	Med/Surg
ICU	5.5	3.5	1.0	1.0	1.0	1.0
Med/Surg	3.5	2.0	0.6	0.6	0.6	0.6
Emergency	1.0	0.5	0.2	0.2	0.2	0.2
Operating Room	0.5	0.2	0.1	0.1	0.1	0.1
Outpatient	0.2	0.1	0.05	0.05	0.05	0.05
Other	0.1	0.05	0.02	0.02	0.02	0.02
Total	7.8	4.8	1.5	1.5	1.5	1.5

Cohen 2012

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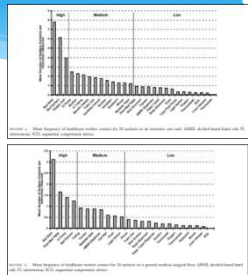
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## Surface Contact

- \* Huslage and Rutala (2010) studied HTS in an ICU and a general med-surg unit.
- \* In the ICU (contacts per interaction):
  - Bedrails = 7.8
  - Bed surface = 6
  - Supply cart = 4




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**Surface Contact**

- \* In the Med-Surg unit (contact per interaction)
  - Bedrails = 3.1
  - Over-bed table = 1.6
  - IV pump = 1.4
  - Bed surface = 1.3
- \* Average surfaces per interaction:
  - ICU = 44, Med-Surg = 15

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**More Math!**

- \* Room entries per hour = 5.5
- \* Bedrail contacts per hour = 17.1 (5.5 (people) x 3.1 (touches))
- \* Bedrail contacts per 15 hour patient 'awake' day = 256
  
- \* Number of times per day bedrail is disinfected by EVS = 1
  - Probability of EVS disinfecting the bedrail = ~50%

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**?255?**

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125?

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60?

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What Happens in 6 days?

1. Patient (850)	6. Overbed Table (223)
2. WOW (634)	7. Vitals Machines (213)
3. Bedrail (375)	8. Wall Shelf (110)
4. IV pump (326)	9. Door (90)
5. Bed Surface (302)	10. In room Computer (78)

Jinadatha BMC Infect Dis 2017

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**What Happens in 6 Days?**

1. Patient (850)	847!	6. Overbed Table (223)
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Jinadatha BMC Infect Dis 2017

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**Question Time!**

Object touched 847 in 6 days: ~140 times per day or 6 times per hour of observation.

What would you be happy with as a percent cleaning compliance?

100%?  
70%?  
50%?  
30%?

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**Lots of touches... but**

Portable medical equipment disinfected only 17 times in 144 hours of observation

17 disinfections / 847 touches = 2%!

- Good fomite?

Most common sequence was patient to bedrail, and bedrail to patient

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Clark et al. Antimicrobial Resistance and Infection Control (2017) 6:108  
DOI 10.1186/s13756-017-0261-z Antimicrobial Resistance and Infection Control Open Access 

**RESEARCH**

"First-person view" of pathogen transmission and hand hygiene – use of a new head-mounted video capture and coding tool

Lauren Clark<sup>1</sup>, Mariella Scotton<sup>1</sup>, Aline Wolfenberger and Hugo Sax<sup>1\*</sup>

\*Looked at: Hand to Surface Exposures (HSE)

- HSE 14.2 per min
  - every 4.2 sec!
- Hand hygiene every 3 min
- 10% of HSE were HCW touching themselves!

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**Math!**

\*Number of times per day bedrail/table is disinfected by the clinical staff = ? (probably zero)

- Probability of Clinical staff performing hand hygiene = 40%

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**Standard Precautions In a Nut Shell**

- \* If they are leaking: protect yourself and limit their movement.
- \* If you touched it or you used it, disinfect it!

\* 20 Words!

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**Is There a Risk?**

- \* Two body substances that are predominately organisms
  - \* Feces –  $1 \times 10^{12}$  per gram dry weight (Kelly)
  - \* Saliva –  $1 \times 10^8$  per mL (Marsh)

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**Targeted Moments of Environmental Disinfection (TMED™)**

1. Before placing a food tray on an over-bed table
2. Before/after any aseptic practice (wounds, lines, etc.)
3. After any procedure involving feces or respiratory secretions within the patient bed space
4. After patient bathing (within bed space)
5. After any object use by / on a patient touches the floor

Gauthier 2020  
<http://www.diverseydigital.com/natools/videoHub/326819127.php>

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It is everyone’s job to disinfect, but it is not everyone’s job to disinfect everything **every time!**

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## Staff

- \* Need to get buy-in when all you hear is 'we don't have time'
- \* Notification system of new symptoms
- \* Ownership of equipment cleaning
  - \* ... we don't have time...

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## Who Cleans and When?

AREA	EVS	FREQ	NURSING STAFF	FREQ	OTHER (Specify)	FREQ
Patient Room						
Bed railcontrols						
Bedside cabinet and other furniture						
Blood Pressure Cuffs/Sphygmomanometer						
Call button and cords						
Computer monitor, mouse, keyboard, and cart (if present)						
Corridor railing						
Data Scope						
Dispensers for towels, soap, sanitizer, etc.						
Door knob/handle and push plates (inside and out) to room						
Glove box and gown holders						
Heart Monitor						
Infusion Pumps and control						
ISO Holder						
IV Poles						
Light Switch						
Multi module monitor Controls						
Multi module monitor touch screens						
Multi module monitor wires and cables						
Nurse Server						

Example

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## Help from Staff

- \* Hand hygiene auditing
  - \* Managers as part of performance appraisal
    - \* Safety!
  - \* Physician leads
  - \* 'C'-Suite (CEO, CFO, CNO, etc.)
  - \* Peers?
  - \* Secret Shoppers?

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**Staff**

- \* IC Champions
  - \* Per unit/ward
  - \* Training

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**EVS – Our Cornerstone!**

- \* Environmental auditing
  - \* ATP, Fluorescence, Visual
- \* Procedure review
- \* Clear definition of what they clean and how often
  - \* Once every 24 hours of high touch?

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**Help from EVS**

Keep open lines of communication

- \* Cam and Effie
- \* “One good housekeeper can prevent more diseases than a dozen doctors can cure” (Eric Rose)  
[www.infectioncontroltoday.com](http://www.infectioncontroltoday.com)

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**Family/Visitors**

\* Jim's brother in hospital



www.arjohuntleigh.com

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**Suggestion**

**Family and Visitors**

Feel free to use our disinfectant wipe on hard surfaces around the patient  
**(not a "baby wipe")**  
 Dispose in the regular garbage  
 Please do not flush!

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**Point of Care Prevention**

- \* Disinfectant wipe at bedside for point of care disinfection (need HMIS 0/0/0 or EPA IV rating)
- \* Alcohol based hand rub at bedside for patient use
  - \* Assess for capability of patient to use!
- \* Pamphlets on the importance of cleaning around patients

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### Help from Volunteers

- \* All volunteers go through orientation (?annually?)
- \* Keep open lines of communication either through your office or their Director
- \* We don't want spies, we want collaborators!

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### Summary

- \* Some days can drive you around the bend!
- \* Take a moment, take a deep breath
- \* Keep your sense of humor
  - \* If you can't laugh once in a while, you are in trouble!
- \* You are not alone
  - \* Have someone you can vent with!

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### Summary

- \* Celebrate your successes!
- \* You can't do it all, everyday!
  - \* Leave some till tomorrow
  - \* Know what is 'urgent and important'
- \* Don't be afraid to say, "NO", or "I can't!" or "not mine!"

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**Summary**

- \* Keep a log of the added stuff!
  - Construction
- \* Involve others in the ongoing efforts
- \* Collaborate
- \* Don't let perfect be the enemy of good!

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Questions?



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Additional Resources

- \* [james.gauthier@diverse.com](mailto:james.gauthier@diverse.com)
- \* [priscella.wagemann@diverse.com](mailto:priscella.wagemann@diverse.com)
- \* <http://www.diverse.digital.com/natools/videoHub/index.php>

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