

# NETEC COVID-19 Webinar Series:

## Supply Management and Inventory Control During COVID-19 – Part One



# Welcome

**Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN**



➤ **Welcome:** Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN

➤ **Supply Management and Inventory Control During COVID-19:  
Providence Sacred Heart Medical Center:**

Bethany White, Manager of Materials Management Supply Chain Operations

Christa Arguinchona, MSN, RN, CCRN

➤ **Supply Management and Inventory Control During COVID-19:  
NYC H+H Bellevue:** John Maharaj, Associate Executive Director of Support Services

Trish Tennill, RN, BSN

➤ **NETEC Resources:** Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN

➤ **Questions and Answers with NETEC**

## National Emerging Special Pathogens Training and Education Center

### Mission Statement

To increase the capability of the United States public health and health care systems to safely and effectively manage individuals with suspected and confirmed special pathogens

For more information

Please visit us at [www.netec.org](http://www.netec.org)  
or email us at [info@netec.org](mailto:info@netec.org)



## Assessment

Empower hospitals to gauge their readiness using  
**Self-Assessment**

Measure facility and healthcare worker readiness using  
**Metrics**

Provide direct feedback to hospitals via  
**On-Site Assessment**

## Education

Provide self-paced education through  
**Online Trainings**

Deliver didactic and hands-on simulation training via  
**In-Person Courses**

COVID-19 focused  
**Webinars**

## Technical Assistance

**Onsite & Remote Guidance**

Compile  
**Online Repository** of tools and resources

Develop customizable  
**Exercise Templates** based on the HSEEP model

Provide  
**Emergency On-Call Mobilization**

## Research Network

**Online Repository**  
Built for rapid implementation of clinical research protocols

**Develop Policies, Procedures and Data Capture Tools** to facilitate research

Create infrastructure for a  
**Specimen Biorepository**



Cross-Cutting, Supportive Activities

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# **Supply Management and Inventory Control During COVID-19: Providence Sacred Heart Medical Center**

**Bethany White, Manager of Materials Management Supply Chain Operations  
Christa Arguinchona, MSN, RN, CCRN**

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## Providence Sacred Heart Medical Center

### ➤ Providence St. Joseph Health (PSJH)

- 51 hospitals in 7 states (WA, OR, MT, AK, CA, NM and TX)

### ➤ Providence Health Care

- Providence Sacred Heart Medical Center (Region 10 RESPTC)
- 4 total hospitals



# Acquiring PPE

## Challenges:

- Hoarding/stealing, fear-based, inappropriate usage
- Availability of PPE nationwide
- Vendor allocations
- Multiple planning meetings

## Approaches:

- State Department of Health allocated PPE
- Donations from multiple sources
- Local purchases
- Providence St. Joseph System
  - Central Planning Team distributed PPE resources
  - PSHMC HUB for our region
    - Hospitals, Clinics, Urgent Cares
  - Pre-ordering for pandemic preparedness
  - Sharing amongst all facilities
- Donated to local charities in need



## PPE Changes/Substitutions

### ➤ New PPE (different/unfamiliar products)

- Approval process with Infection Prevention
- Develop new product number
- Develop “no-charge” purchase order for tracking
- Daily inventory counts/reporting of all PPE

### ➤ Collaboration with nursing leadership

- Approaches/substitutions
- Flexibility and adaptability

Processes/policies  
constantly changing



Daily changes  
in PPE use



New headache every day!

# Innovative Approach to Inventory Control

## ➤ Lock down of PPE

- Securely stored all bulk PPE in Supply Chain
- Removed PPE from unit stock carts
- Identified locked storage area in each unit
- Daily order for each unit
  - Assigned daily PPE ordering levels for each unit based off usage
- Staffed PPE room 24/7 to ensure it was secured and departments got what they needed
- Items returned to supply carts based on availability
- Challenges:
  - Supply chain staff = police
  - Consistency of process



# Innovative Approach to Inventory Control

## ▶ PAPER Management Plan

- Appointed a clear owner to develop and manage the plan
- PAPER tracking spreadsheet
  - Share point
  - Department, manager, inventory date, repair/reason, serial #, inventory date, filter change date:

CART#	Lot #- Ser#	Department Room	Name	Phone	Current Location	Out for Repair/REASON	Date Sent	CONFIRMED SN #	Inventory Date	Date Filter Changed
		9th floor	Meredith Ellis	509-474-4524	9N			021418		

- Developed PAPER repair process
  - Increase use = increase in needed repairs
  - Innovative Clinical Engineering expert!
  - Utilize online request for repair, allows tracking
- Allocation plan for prioritization of use



# Innovative Approach to Inventory Control

## PAPR accessory conservation strategies:

- No accessory orders filled for 7 months
- Assigned shields and headbands for reuse
- Unit responsibility to develop storage plan
- Job aid developed and distributed

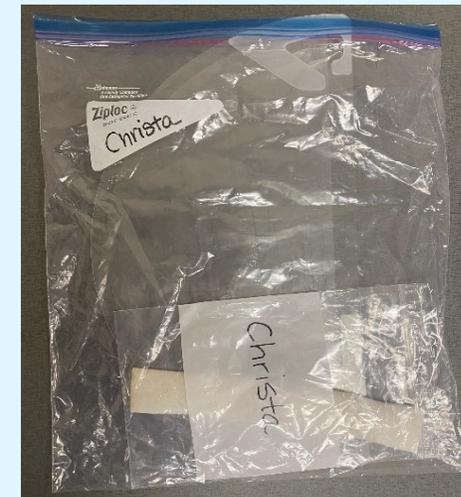
## Strengths

- Extended use, staff preference/comfort
- It worked! No known staff acquired infections

## Challenges

- Which disinfectant?
- Increased use from training
- Decreased visualization from multiple cleanings

CAPR DISINFECTION PROCESS (MaxAir with Lens Cuff)	✓ or initials
Lens cuff will be reused until its' integrity is compromised. Care must be taken when applying and removing to extend the life of the lens cuff. Lens cuff will be stored in a bag in designated location on unit.	
Comfort strip will be issued to each caregiver, name written on side that adheres to Velcro, removed after use and stored in a bag with name on it in designated place on unit.	
1. After doffing process occurs in patient room, caregiver will have clean gloves on and will use a disinfectant wipe to proceed through the door into the hallway and proceed to CAPR doffing area.	
2. Doff CAPR <ol style="list-style-type: none"> <li>Remove disinfectant wipe and have ready</li> <li>Remove CAPR by grabbing back knob and thoroughly disinfect all components with wipe, including lens cuff and cord</li> <li>Place on surface to have appropriate contact time dependent on disinfectant wipe used</li> <li>Place in clear white bag, tie up bag and write name on bag with Sharpie to reuse CAPR and lens cuff throughout shift (<i>unless end of shift, then remove lens cuff and place in a bag and label with name to be used during next shift. Place comfort strip in bag with name to be reused.</i>)</li> <li>Doff belt and battery and disinfect with wipe</li> </ol>	
3. Perform hand hygiene	
4. Doff gloves using glove in glove technique	
5. Perform hand hygiene	
6. Return bagged CAPR to cart to reuse throughout shift	
7. Return belt and battery to cart and plug in battery to charge	



## Supply Chain/Nursing Coordination

### ➔ Approval needed for accessory item orders

- Able to identify departments needing more education
- Prioritized high risk departments
- Established clear request process

### ➔ Constant Communication

- Awareness of inventory
- POC for supply chain staff
- Coordinated approach based on changing circumstances
- Improved collaboration amongst involved leadership

# Innovative Approach to Inventory Control

- ✓ CNO: 5 Things to Know this Week
- ✓ Huddle Highlights
- ✓ Safety Huddle Announcements
- ✓ Weekly system staff communications
- ✓ COVID Circle One communications
- ✓ Reassurance regarding changes in PPE pieces
  - ✓ Different colored masks, gowns, gloves
  - ✓ Focus on fact that we have PPE

✓ **Everyone needs to hear the rationale!!**

✓ **Be transparent!!**



COVID-19  
JOB AID

**PPE CONSERVATION STRATEGIES:  
EXTENDED USE AND LIMITED REUSE OF MASKS AND N95 RESPIRATORS**

When supplies of N95 respirators become depleted CDC recommends extended use and limited reuse as strategies to conserve supplies. This job aid provides details on how to safely implement those strategies.

Supply Item (Examples only)	Important Conservation Information
<p><b>Surgical or Procedural Mask</b></p> 	<ul style="list-style-type: none"> <li>• When wearing a respirator or mask:                             <ul style="list-style-type: none"> <li>○ Determine whether a mask or respirator is appropriate based on local policy and the procedure/care you are performing</li> <li>○ It must be covered by a full-face shield when within six feet of the patient.</li> <li>○ Respirators must be monitored for fit and function by the user throughout use.</li> </ul> </li> <li>• Respirators and masks should be conserved using these strategies:                             <ul style="list-style-type: none"> <li>○ Caregiver can wear continuously during their shift (regardless of duration of shift)</li> <li>○ Caregiver can don and doff their mask/respirator each time it is needed during their shift (regardless of number of times donned/doffed during shift). In between uses, it should be stored according to local policy</li> <li>○ Mask should no longer be used if it becomes damp, damaged, visibly soiled, or hard to breathe through</li> </ul> </li> <li>• When discarding a respirator:                             <ul style="list-style-type: none"> <li>○ Each facility will have a different method for collecting respirators for reprocessing. Follow your local process.</li> </ul> </li> </ul>
<p><b>N95</b></p> 	
<p><b>Face shield</b></p> 	

- Must be disinfected inside and outside with hospital- approved disinfectant wipe after doffing.
  - Consider wiping with wet cloth after disinfection if irritation occurs
- Label face shield and store in designated location until damaged or unusable
- Perform hand hygiene before and after contact
- If using goggles (no face shield), masks/respirators must be discarded after use

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# **Supply Management and Inventory Control During COVID-19: NYC H+H Bellevue**

**John Maharaj, Associate Executive Director of Support Services  
Trish Tennill, RN, BSN**

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## NYC H+H Bellevue

➔ Bellevue Hospital is part of the greater H+H public health system

- Includes 11 acute care hospitals
- 5 post acute/long-term care facilities
- Shared supply chain
- Centralized ordering and storage locations for PPE stores



## PPE Needs - In the Beginning

### ➤ PPE

- PPE was in accordance to CDC COVID-19 guidelines

### ➤ Initially

- PPE distribution started with three carts based on our initial predictions - 1:1 patient to cart
- Using existing crash carts allowed the PPE to be portable
- Supplies were acquired from central stores, then taken to satellite PPE room
- Labor
  - Restocked during the day by central stores staff
  - Three in-house staff members operated the night shifts



# PPE Needs – As the Pandemic Numbers Increase

➤ PPE demands increased as:

- The number of patients increased
- There was an influx of outside staff
- Protocols changed



## PPE Supply

➔ PPE changed from day to day:

- PPE varied from different supply chains
- Donations

➔ All PPE was approved by either

- H+H Central Infection Control
- Bellevue Infection Control



# PPE Supply Chain and Delivery Services

## Strengths

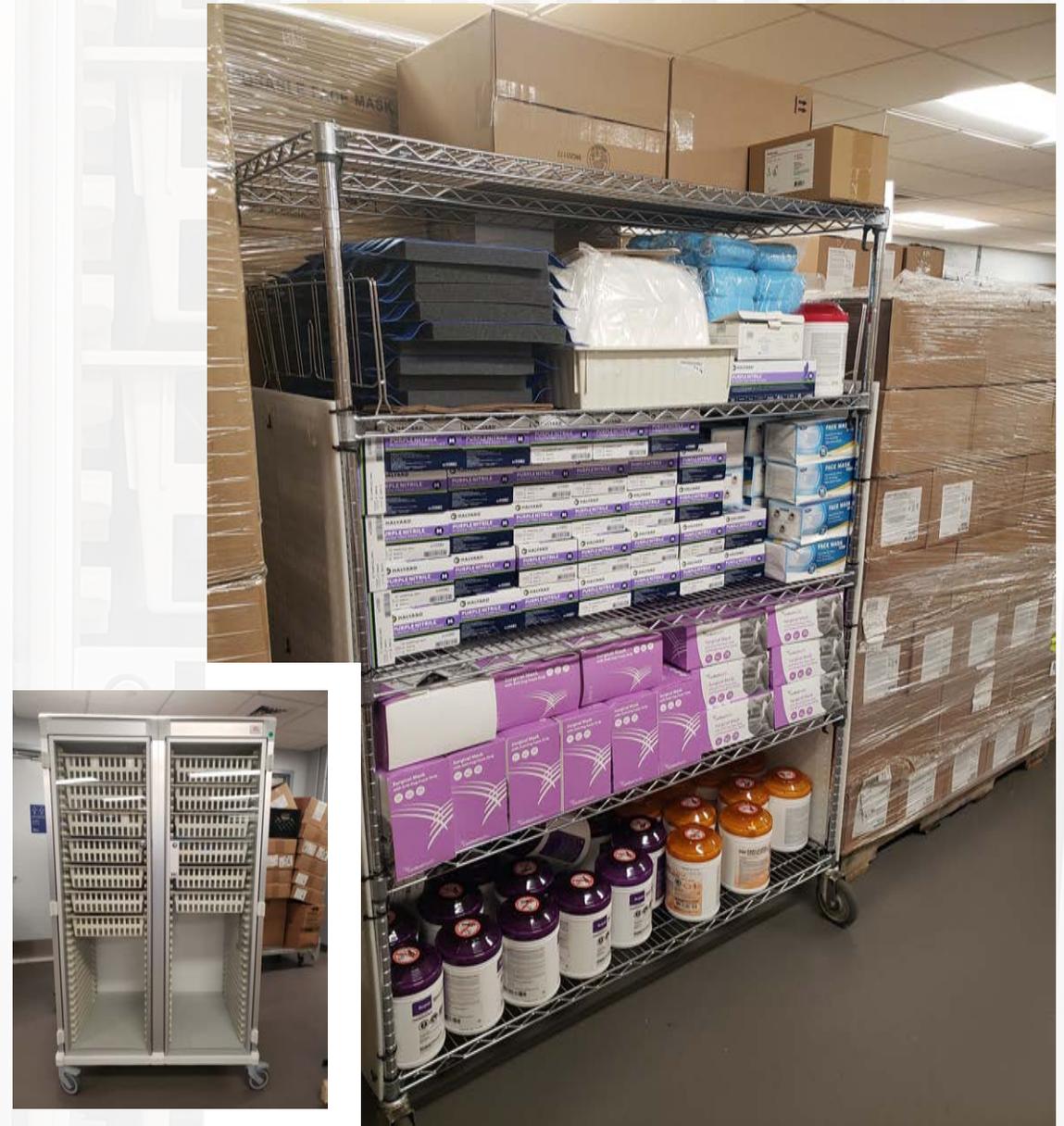
- In house labor pool
- Outside vendor support

## Challenges

- Hard to keep tight inventory control with the number of patients, care teams, and new staff
- Could not keep up with burn rate
- Sizing

## Benefits

- Could borrow from our sister facilities
- Corporation had a large off-site warehouse



## State of Preparedness

### ➔ Where do we go from here

- Low Covid census gives us a chance to do inventory

### ➔ Implementation of a 90-day supply of PPE

- This is across the corporation

### ➔ Standardization of respiratory protection

- Will assure its availability



## State of Preparedness

### Tracking of valuable resources

- N95 respirators
- PAPRs
- DLC lenses

### Restructured PPE delivery

- From 24/7 delivery to M-F 7a-7p



## Conservation Strategies

### Personal Protective Equipment:

- Bundling care

### Reuse of Respiratory Protection:

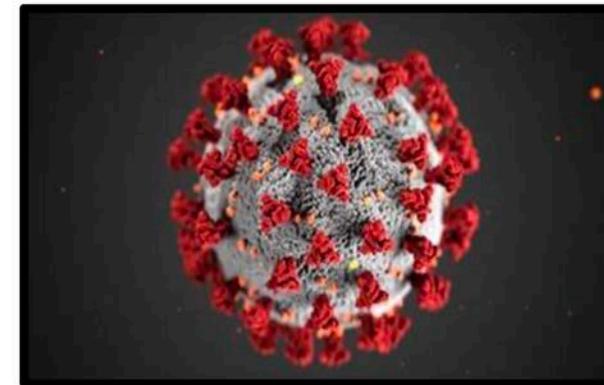
- N95 respirators
- PAPR DLC lenses
- Face shields

NYC HEALTH HOSPITALS | Bellevue

JULY 2020

### Infection Prevention & Control SARS-CoV-2 (COVID-19) Resource Guide

JULY 2020



## Education Strategies

### ➤ Initial PPE training

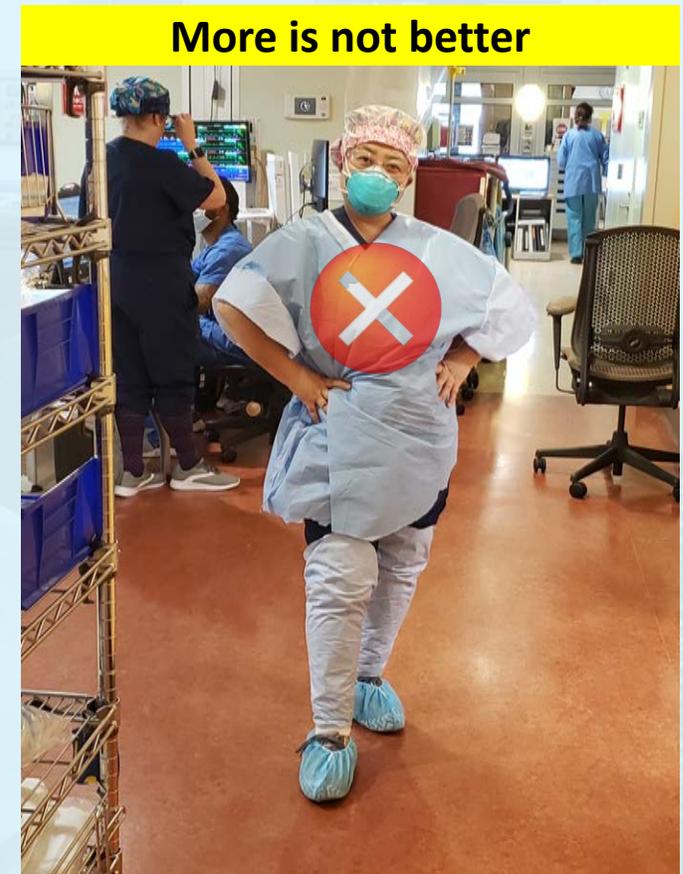
- Reinforcement that gowns, gloves, and respiratory protection may change

### ➤ Making staff feel safe and secure

- Going into the room with them

### ➤ More is not better

- Adding more can complicate donning and doffing





# **NETEC Resources**

**Sharon Vanairsdale, DNP, APRN, ACNS-BC, NP-C, CEN, FAEN, FAAN**



## NETEC is Here to Help

**NETEC** will continue to build resources, develop online education, and deliver technical training to meet the needs of our partners

### Ask for help!

- ➔ Send questions to [info@netec.org](mailto:info@netec.org) - they will be answered by NETEC SMEs
- ➔ Submit a Technical Assistance request at [NETEC.org](https://www.netec.org)

# Questions and Answers



**NETEC eLearning Center**

**[courses.netec.org](https://courses.netec.org)**

**NETEC Skill videos**

**[youtube.com/thenetec](https://youtube.com/thenetec)**

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