Disclosures. **Shruti K. Gohil, MD, MPH**, **Medline** (Other Financial or Material Support, Co-Investigator in studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)**Molnycke** (Other Financial or Material Support, Co-Investigator in studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)**Stryker (Sage)** (Other Financial or Material Support, Co-Investigator in studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products) **Edward Septimus, MD**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic products)**Molnlycke** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic products) **Kenneth Sands, MD, MPH**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Eunice J. Blanchard, MSN RN**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Julia Moody, MS**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product)**Molnlycke** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Deborah S. Yokoe, MD, MPH**, Nothing to disclose **Jonathan Grein, MD**, **Gilead** (Other Financial or Material Support, Speakers fees) **Stuart H. Cohen, MD**, **Seres** (Research Grant or Support) **Kimberly N. Smith, MBA**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Brandon Carver, BA**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Russell Poland, PhD**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Jonathan B. Perlin, MD, PhD**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product)**Molnlycke** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Richard Platt, MD, MSc**, **Medline** (Research Grant or Support, Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product)**Molnlycke** (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) **Susan S. Huang, MD, MPH**, **Medline** (Other Financial or Material Support, Conducted studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)**Molnlycke** (Other Financial or Material Support, Conducted studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)**Stryker (Sage)** (Other Financial or Material Support, Conducted studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)**Xttrium** (Other Financial or Material Support, Conducted studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products)

427. Healthcare Personnel Perceived Benefit of Infection Prevention Strategies during COVID

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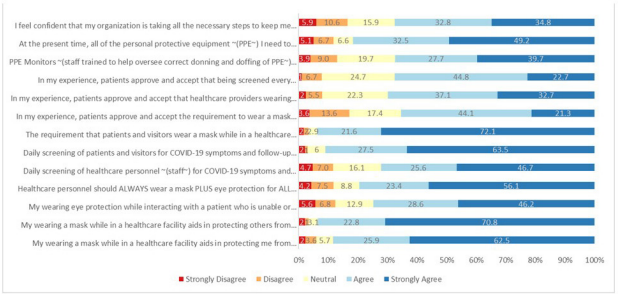
Session: P-19. COVID-19 Infection Prevention

Background. During the COVID-19 pandemic, many infection prevention policy and practice changes were introduced to mitigate hospital transmission. Although each change had evidence-based infection prevention rationale, healthcare personnel (HCP) may have variable perceptions of their relative values.

Methods. Between October-December 2020, we conducted a voluntary, anonymous, IRB-approved survey of UNC Medical Center HCP regarding their views on personal protective equipment (PPE) and hospital policies designed to prevent COVID acquisition. The survey collected occupational and primary work location data (COVID unit or not) as well as their views on specific infection prevention practices during COVID. Chi squared tests (two tailed) were used to compare differences in the proportions.

Results. The overall results are displayed (Figure). Among the 694 HCP who responded to the survey, we found HCP were largely (68%) satisfied that the organization was taking all the necessary measures to protect them from COVID-19. A significantly greater proportion (14% more) of HCP (81.7% compared to 67.6%; 95% CI of difference 9.4-18.5%, P< 0.0001) agreed that all PPE was available to them compared to those who were confident that the organization was taking necessary steps for protection, highlighting that safety is more than simply availability of supplies. More than 90% felt that daily screening of patients/visitors and patient/visitor mask requirements were important for protecting them from acquiring COVID in the workplace and that wearing a mask themselves was a key intervention for protecting others. Fewer HCP (72-80%), although still a majority, perceived that eye protection and daily symptom screening for HCP were beneficial. Symptom screening for patients/visitors was perceived by 19% more HCP (90.9% compared to 72.2%; 95% CI of difference 15-23%) to be beneficial than symptom screening of HCP (P< 0.0001).

Figure. HCP Perceived Benefit of Infection Prevention Strategies during COVID



Conclusion. Although infection prevention strategies were implemented based on evidence and in alignment with CDC recommendations, it is important to acknowledge that the perception and acceptance of these recommendations varied among our HCP. Compliance can only be optimized with key interventions when we seek to understand the perceptions of our staff.

Disclosures. **David J. Weber, MD, MPH**, **PDI** (Consultant)

428. Assessing the Confidence, Knowledge and Preferences of Hospital Staff with Regards to Personal Protective Equipment (PPE) Practices During the COVID-19 Pandemic

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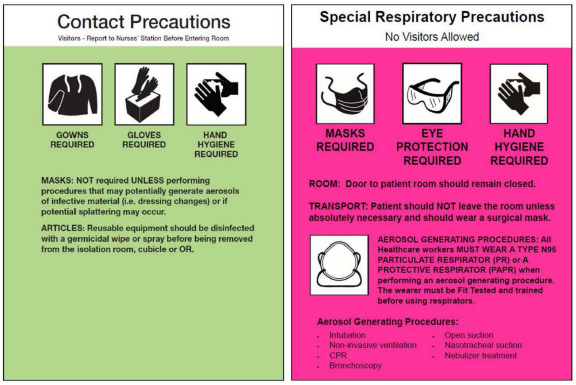
Session: P-19. COVID-19 Infection Prevention

Background. Effective use of personal protective equipment (PPE) by hospital staff is critical to prevent transmission of COVID-19. This study examines hospital staff confidence in and knowledge of effective PPE use, and their preferences for learning about PPE practices.

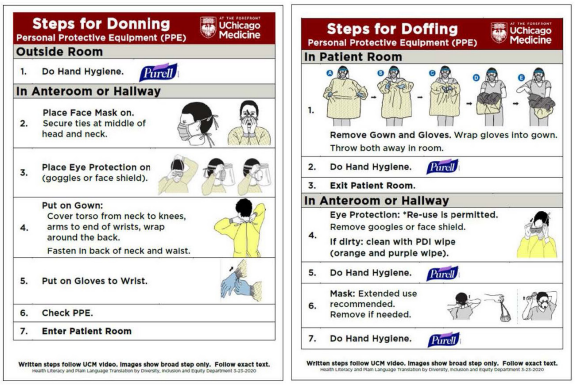
Methods. Three isolation precautions signs were created for use in the care of those with or under investigation for COVID-19 infection: first, a special respiratory precautions sign designed by infection control; and next, two signs outlining proper donning and doffing practices – one created internally with the support of health literacy, and another developed with a design firm (IDEO) using principles of human-centered design (Figure 1). All signs were used for ≥ 10 weeks prior to distribution of a questionnaire (REDCap) to clinical and non-clinical hospital staff. Those who had not worked on hospital units during the pandemic (after March 15, 2020) were excluded. The 38-item survey was sent by supervisors over email between July 14-31, 2020, and examined demographics, confidence in and knowledge of PPE best practices, and preferences for each precaution sign with regards to trustworthiness, ease of following, informative content, and clarity of image/layout. Responses were reported using descriptive statistics. A non-parametric test of trends compared staff preferences across signs. Logistic regression examined the association between answering all knowledge-based questions correctly and staff role and confidence in PPE practices (Stata).

Figure 1. Personal Protective Equipment Signage

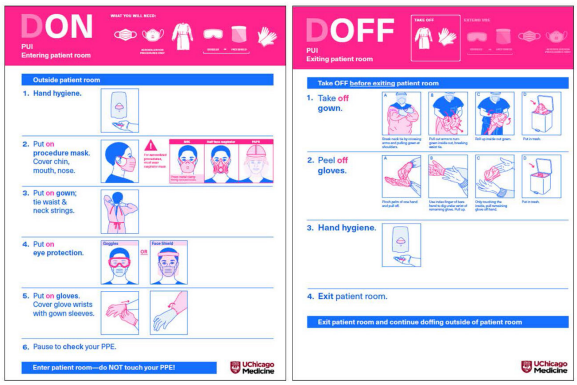
A. Routine Signage:



B. Health Literacy Signage:



C. Design Firm Signage:



Results. Of the 531 respondents, 461 were eligible for inclusion. The majority were female, white, and not high risk for COVID-19 (Table 1). Most were confident about PPE use, correctly answered questions examining knowledge of PPE best practices, and found PPE signage helpful (Table 2). Staff preferred the professionally designed sign for informative content (p< 0.01) and clear imagery/layout (p=0.01) (Table 3). Confidence in PPE practices and physician or nurse roles were associated with answering all knowledge-based questions correctly (p< 0.001 and p=0.04, respectively).

Table 1. Descriptive Characteristics of Survey Respondents

Variable	Value	N (%)
Role	Physician (attending, APP, resident, fellow)	160 (34.7)
	Nurse	191 (41.4)
	Other	110 (23.9)
Gender	Female	327 (70.9)
	Male	104 (22.6)
	Prefer not to answer	26 (5.6)
Race	White	259 (56.2)
	Asian	44 (9.5)
	Black	41 (8.9)
	More than one race selected	32 (6.9)
	Prefer not to answer	85 (18.4)
Age in years	18-34	158 (34.3)
	35-44	145 (31.5)
	45-65+	143 (31.0)
	Prefer not to answer	15 (3.2)
Provide care to:	COVID-19 cohort unit patients	77 (16.7)
	No COVID-19 or PUI patients	51 (11.1)
	COVID-19 or PUI, but no cohort unit patients	333 (72.2)
Work on following units	Adult medical surgical	215 (82.4)
	Adult intensive care	173 (66.3)
	Adult emergency department	90 (34.5)
	Pediatric medical surgical	63 (24.1)
	Pediatric intensive care	78 (29.9)
	Pediatric emergency department	61 (23.4)
	Family birth center	57 (21.8)
	Operating rooms	56 (21.5)
High risk for COVID-19	No	305 (66.2)
	Yes	127 (27.5)
	Prefer not to answer/Blank	29 (6.3)
Tested positive for COVID-19	No	431 (93.5)
	Yes	8 (1.7)
	Prefer not to answer/Other	22 (4.8)

Abbreviations: APP, advanced practice provider; COVID-19, coronavirus disease; PUI, person under investigation.

Table 2. Survey Items Assessing Confidence, Knowledge and Learning

Variable	Value	N (%)
Confident about PPE use	Extremely	180 (39.0)
	Somewhat	209 (45.3)
	Neutral	28 (6.1)
	Not confident	37 (8.0)
	Extremely not confident	7 (1.5)
Proper steps for donning PPE prior to room entry	Correct	355 (77.0)
	Incorrect	81 (17.6)
	Do not know	25 (5.4)
Where to doff when leaving room	Correct	389 (84.4)
	Incorrect	55 (11.9)
	Do not know	17 (3.7)
If remove N95 from over nose and mouth, I can reuse	Correct	325 (70.5)
	Incorrect	84 (18.2)
	Do not know	52 (11.3)
Selecting mask to safely enter room of COVID-19 PUI undergoing aerosol generating procedure	Correct	445 (96.5)
	Incorrect	6 (1.3)
	Do not know	10 (2.2)
Using signage to facilitate use of PPE	Always	173 (37.5)
	Initially, not currently	98 (21.3)
	Often	98 (21.3)
	Only when COVID-19 precautions present	85 (18.4)
	Only when in COVID-19 cohort unit	7 (1.5)
Following is most helpful to understand COVID-19 related PPE practices	Signage	353 (76.6)
	Email	214 (46.4)
	Huddles	130 (28.2)
	Observers	95 (20.6)
	Videos	93 (20.2)
	Town halls	57 (12.4)
	Other	36 (7.8)

Abbreviations: COVID-19, coronavirus disease; PPE, personal protective equipment; PUI, person under investigation.

Table 3. Examining Preferences for Different Personal Protective Equipment Precautions Signs

Sign Feature	Sign Type	Strongly Agree N (%)	Agree N (%)	Neutral N (%)	Disagree N (%)	Strongly Disagree N (%)
Trustworthy	Routine	171 (37.1)	191 (41.4)	62 (13.4)	18 (3.9)	19 (4.1)
	Health literacy	112 (24.3)	238 (51.6)	85 (18.4)	19 (4.1)	7 (1.5)
	Design firm	149 (32.3)	244 (52.9)	54 (11.7)	8 (1.7)	6 (1.3)
Easy to Follow	Routine	125 (27.1)	244 (52.9)	62 (13.4)	17 (3.7)	13 (2.8)
	Health literacy	128 (27.8)	228 (49.5)	80 (17.4)	22 (4.8)	7 (1.5)
	Design firm	140 (30.4)	244 (52.9)	54 (11.7)	15 (3.3)	8 (1.7)
Informative Content	Routine	126 (27.3)	249 (54.0)	54 (11.7)	23 (5.0)	9 (2.0)
	Health literacy	125 (27.1)	253 (54.9)	68 (14.8)	11 (2.4)	4 (0.9)
	Design firm	157 (34.1)	240 (52.1)	48 (10.4)	11 (2.4)	5 (1.1)
Clear Imagery and Layout	Routine	121 (26.2)	237 (51.4)	74 (16.1)	21 (4.6)	8 (1.7)
	Health literacy	121 (26.2)	235 (51.0)	76 (16.5)	24 (5.2)	5 (1.1)
	Design firm	147 (31.9)	238 (51.6)	60 (13.0)	11 (2.4)	5 (1.1)

N (%) for those encountering signs on patient units was 449 (97.4), 112 (24.3) and 294 (63.8) for Standard, Modified, and Design Firm signs, respectively.

Conclusion. In a convenience sample of hospital staff, most were confident and knowledgeable about PPE use, found PPE signage helpful, and preferred professionally designed signs.

Disclosures. **All Authors**: No reported disclosures

429. Infection Prevention During Use of a Warm Zone Model in Cohort Patient Care Locations during the COVID-19 Pandemic

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Session: P-19. COVID-19 Infection Prevention

Background. The COVID-19 pandemic required hospitals to care for influxes of patients in cohort locations during critical shortages of personal protective equipment (PPE). Safety zones can be used to protect healthcare workers caring for patients with infectious pathogens. During the COVID-19 pandemic, our hospital developed a Warm Zone model (WZM) to streamline the care of patients with COVID. We established specific areas in our COVID cohort units where staff were permitted to bridge between rooms without doffing gowns, but still doffing gloves and performing hand hygiene between patients. We recognized that a WZM could inadvertently increase risk of nosocomial transmission of pathogens if gowns acted as fomites. For this reason, patients with known infectious pathogens were excluded from the WZM. To measure for unintended harmful consequences of the WZM, our Infection Prevention (IP) department performed surveillance for hospital onset (HO) Clostridioides difficile (CDI), Carbapenem-resistant enterobacteriaceae (CRE) and Methicillin-resistant Staphyloccocus aureus (MRSA) bloodstream infections on units that implemented the WZM.

Methods. Two intensive care units and 3 wards where COVID positive patients were cohorted were included in surveillance. The timeframe for this analysis was 7/1/2020 - 3/31/2021. An electronic surveillance system was used to measure HO infections. The National Healthcare Surveillance Network (NHSN) LabID definitions were used when determining HO CDI and MRSA bloodstream infections (BSI).

Results. During the study period, there were no HO CRE, 1 HO CDI, and 2 HO MRSA BSI in cohort units. There was no evidence to suggest that the HO CDI or HO MRSA BSI were associated with use of a WZM. During this time period, there were 14 cases of community onset (CO) CDI, 2 cases of CO MRSA BSI, and one CO CRE.

Conclusion. During use of a WZM in COVID cohort units, IP did not identify significant increase in HO CDI, CRE, or MRSA BSI compared to non-cohort units. We were limited in our ability to measure acquisition of pathogens because active surveillance screening for colonization was not performed. However, we were able to safely employ a WZM to streamline patient care in COVID cohort areas without evidence of causing nosocomial infections via patient-to-patient transmission.

Disclosures. **All Authors**: No reported disclosures

430. Strategies for Prevention of COVID-19 Transmission in Hospitals

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Session: P-19. COVID-19 Infection Prevention

Background. Infection control measures against the coronavirus disease 2019 (COVID-19) within a hospital often rely on expert experience and intuition due to the lack of clear guidelines. This study surveyed current strategies for the prevention of the spread of COVID-19 in medical institutions.

Methods. Upon systematic review of the guidelines at the national level, 14 key topics were selected. Six hospitals were provided an open survey that assessed their responses to these topics between August 11 and 25, 2020. Using these data, an online questionnaire was developed and sent to the infection control teams of 46 hospitals in South Korea. The survey was conducted between January 31, 2021, and February 20, 2021.

Results. All 46 hospitals responded to the survey, and 24 hospitals (52.2%) had treated 100 or more cases of COVID-19. All hospitals operated screening clinics, and the criteria were respiratory symptoms (100%), fever (97.8%), and epidemiological association (93.5%). It was found that 89.1% (41/46) of hospitals allowed symptomatic patients to visit their general outpatient clinics if fever or respiratory symptoms were not associated with COVID-19. Most hospitals (87.2%; 34/39) conducted polymerase chain reaction (PCR) tests for all hospitalized patients. Moreover, 76.1% (35/46) of hospitals implemented preemptive isolation policies for hospitalized patients, of which 97.1% (34/35) were released from isolation after a single negative PCR test. A little over half of the hospitals (58.7%; 27/46) treated patients that met the national criteria for release from isolation but consistently had positive PCR results. Of these hospitals, 63% (17/27) used N95/KF94 masks, and 40.7% (11/27) used surgical masks without other personal protective equipment for treating them. Most hospitals (76.9%; 20/26) accommodated them in shared rooms when the cycle threshold value of the PCR test was more than a certain value (34.6%; 9/26), or after a certain period that satisfied the national criteria (26.9%; 7/26). Finally, 76.1% (35/46) of hospitals performed emergency procedures or operations on suspected patients.

Table 1. Screening and selective treatment policy to prevent COVID-19 patients from entering the hospital

Table 1. Screening and selective treatment policy to prevent COVID-19 patients from entering the hospital

	Total (n = 46)	No. of COVID-19 cases <100 (n = 22)	No. of COVID-19 cases ≥100 (n = 24)	*P*-value
Existence of screening clinic for COVID-19	46 (100)	22 (100)	24 (100)	-
The criteria of patients that were treated at the screening clinic[1]				
Fever of unknown cause	45 (97.8)	22 (100)	23 (95.8)	1.000
Respiratory symptoms	46 (100)	22 (100)	24 (100)	-
Epidemiological association with COVID-19 patients	43 (93.5)	20 (90.9)	23 (95.8)	0.600
Family members had fever, respiratory symptoms or epidemiological association with COVID-19 patients	35 (76.1)	17 (77.3)	18 (75.0)	0.857
Want to test for COVID-19 voluntarily	39 (84.8)	21 (95.5)	18 (75.0)	0.098
Entry into general outpatient clinics was allowed for patients with fever or respiratory symptoms likely not associated with COVID-19[1]	**41 (89.1)**	**22 (100)**	**19 (79.2)**	**0.050**
No epidemiological association with COVID-19 patients	11/41 (26.8)	5/22 (22.7)	6/19 (31.6)	0.524
Medical staff at the screening clinic determined that the possibility of COVID-19 was minimal	24/41 (58.5)	14/22 (63.6)	10/19 (52.6)	0.476
The patients were negative for COVID-19 testing within a certain period (e.g. two to three days)	38/41 (92.7)	22/22 (100)	16/19 (84.2)	0.091
Scheduled follow-up for diseases presenting fever or respiratory disease	26/41 (63.4)	13/22 (59.1)	13/19 (68.4)	0.536
Performing PCR tests for non-suspected cases of COVID-19[1]	39 (84.8)	20 (90.9)	19 (79.2)	0.418
The subject of testing				
Patients requiring general anesthesia	19/39 (48.7)	9/20 (45.0)	10/19 (52.6)	0.634
All patients requiring hospitalization	34/39 (87.2)	19/20 (95.0)	15/19 (78.9)	0.182
Patients requiring hospitalization in a closed psychiatric ward	9/39 (23.1)	3/20 (15.0)	6/19 (31.6)	0.273
Patients who came from a different institution or a nursing home	16/39 (41.0)	7/20 (35.0)	9/19 (47.4)	0.433
Patients requiring hospitalization in the intensive care unit	9/39 (23.1)	5/20 (25.0)	4/19 (21.1)	1.000
Performing emergency procedures or operations on patients suspected of COVID-19	**35 (76.1)**	**20 (90.9)**	**15 (62.5)**	**0.024**

Note: Values are presented as number (%)

Abbreviations: COVID-19, coronavirus disease 2019; PCR, polymerase chain reaction

[1] This question requested the respondent to select multiple items.

[2] Suspected cases of COVID-19 include fever, respiratory symptoms, and epidemiological associations with COVID-19 patients.