Session: P-19. COVID-19 Infection Prevention

Background. Nursing home residents, a vulnerable population, experienced an extraordinary surge of COVID-19 cases and deaths at the beginning of the pandemic. Multidisciplinary collaboration from the Detroit Health Department (DHD), academic centers, along with interim guidance from the CDC provided a structured approach to control SARS-CoV-2 in Detroit skilled nursing facilities (SNF). We aim to describe this model.

Methods. There were 26 SNF prioritized by the DHD over a 13-month period from 3/2020 - 4/2021. Testing for SARS-CoV-2 occurred biweekly, on average, at each facility for staff and residents. Any staff or resident cases were investigated by a specialized investigatory team to determine outbreak status. Any resident that was identified as positive for SARS-CoV-2 was moved to a designated in-house quarantine unit or specific COVID-19 designated nursing homes within the City of Detroit, and cohorting guidance was provided. Facilities were evaluated for environmental controls, PPE provided as needed and infection prevention guidance was provided. COVID-19 vaccination was conducted by pharmaceutical chains or the DHD and vaccine education sessions were conducted for nursing home staff and residents.

Results. On average, SNF facilities served a total of 2,262 residents (2031-2367 range) and employed a total of 2,965 staff (1034-3124 range) during the period from 7/2020 - 4/2021. SARS-CoV-2 cases overall for Michigan and Detroit are shown in Figure 1. In SNF facilities, cases ranged from zero to 279 cases in residents and zero to 115 cases per week in staff (Figure 1). Beginning 3/2020, the majority of cases were residents, whereas after 10/2020, staff cases exceeded resident cases. Immunization rates were 63% (partial) and 58% (complete) for residents, and 26% and 23% for staff, respectively. Measures to reduce vaccine hesitancy included organized education sessions were conducted for nursing home staff and residents.

Conclusion. We describe the effectiveness of multidisciplinary interventions to control dissemination, morbidity and mortality of SARS-CoV-2 amongst SNF residents in Detroit. We emphasize the continued need to address vaccine hesitancy and importance of this model as successful interventions to decrease infection rates.

Disclosures. Paul E. Kilgore, M.D., M.P.H.; Johnson and Johnson (Janssen) (Grant/Research Support, Scientific Research Study Investigator) Marcus Zervos, MD, contact (Advisor or Review Panel member) janssen (Grant/Research Support) merck (Grant/Research Support) moderna (Grant/Research Support) pfizer (Grant/Research Support) serono (Grant/Research Support)
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 product) Emnice 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) Kenneth Sands, MD, MPH, Medline (Other Financial or Material Support, Conducted studies in which participating hospitals received contributed antiseptic product) Jonathan Grein, MD, Gilead (Other Financial or Material Support, Speakers fees) Stuart H. Cohen, MD, Mieres (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) Molnycke (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) 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) Molnycke (Other Financial or Material Support, Conducted studies in which participating hospitals and nursing homes received contributed antiseptic and cleaning products) Xtreem (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

Emily Sickbert-Bennett, PhD, MS; Natalie Schnell, BSN, RN, CIC; Shelley Summerlin-Long, MPH, MSW, BSN, RN; Brooke Brewer, BSN, RN, MS, CNML; Lauren DiBaise, MS; Lisa Stancell, MPH; Lisa Teal, BSN, RN, CIC; David J. Weber, MD, MPH; David J. Weber, MD, MPH; UNC Health Care, Chapel Hill, NC; *UNC Medical Center, Chapel Hill, North Carolina; ‡University of North Carolina, Chapel Hill, NC

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-19 Pandemic

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

Rachel Brown, MSHS; Sharon Markman, MHA; Amanda Brown, MS,MLS(ASCP),CIC; Rukhshan Mian, MS; Vineet Arora, MD, MA; Craig Umscheid, MD, MS; UChicago Medicine, Chicago, Illinois

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 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).