

infection control and prevention team and the department of neonatology. (3) We re-evaluated compliance with hand hygiene practices and cleaning of high-touch surfaces, then we compared the rates of positive MRDO cultures before and after these interventions. **Results:** Before the interventions, 453 hand hygiene observations were recorded and 322 high-touch-surface cleaning observations were recorded. The hand hygiene compliance rate improved significantly from 33.2% to 85.5% (PR, 11.9; 95% CI, 7.4–19.3; $P < .01$). The high-touch-surface cleaning rate increased from 82.4% to 93.5% (PR, 3.1, 95% CI, 1.5–6.4; $P < .01$). The rate of high-touch surfaces being cleaned with proper technique increased from 38.5% to 87.9% (PR, 11.6; 95% CI, 6.3–21.3; $P < .01$). In total, 103 swab samples were positive for MRDOs by culture before and after the intervention. The rate of positive MRDO cultures decreased from 80.8% to 64.7% ($P = .017$). **Conclusions:** Enhancing hand hygiene and high-touch-surface cleaning compliance helped reduce MRDO transmission in the Department Neonatology of Hung Vuong Hospital.

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Subject Category: IPC in Special Settings

Abstract Number: SG-APSID1061

First-response infection prevention and control during COVID-19 outbreaks in residential aged-care facilities

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Objectives: COVID-19 has highlighted the importance of the hierarchy of controls and early implementation of transmission-based precautions during outbreaks in residential aged-care facilities (RACFs). The RACF outreach team is a service provided by the Sydney Local Health District (SLHD) that provides RACFs with expert clinical care and advice, along with outbreak management and infection control and prevention education. **Methods:** The RACF outreach team developed 2 unique IPC management tools designed to assist RACFs during the COVID-19 pandemic: (1) the comprehensive initial review and (2) first-responder assessment tool designed to assist the team in identifying high-risk issues during afterhours shifts. The tool reviews 5 key components in outbreak management: screening, PPE usage, resident care, communication and signage, and infection control and prevention. The outreach team provides an IPC report of the comprehensive initial review, which provides site-specific advice regarding zoning, cohorting, implementation of donning and doffing stations, safe staffing and workflows, ventilation, personal protective equipment (PPE) use, and PPE safety. The recommendations supplied in the SLHD IPC report are provided to facilities and are implemented at the facility level. These reviews are followed up in meetings of the outbreak management team conducted virtually via Zoom videoconferencing. These meetings include an RACF senior manager and a representative from the local PHU, the outreach service, the Australian Commonwealth, the Aged Care Commission, an SLHD executive manager, and an infectious diseases practitioner. **Results:** Since the outbreak of the SARS-CoV-2 α (omicron) variant began in Sydney, Australia, in November 2021, 58 facilities with >2,500 residents have been reviewed, and 57 of these facilities had a COVID-19 outbreak at some point during the pandemic. **Conclusions:** The RACFs in SLHD continue to report death rates <5% among all SARS-CoV-2–positive residents.

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Reappraisal of the effectiveness of a care bundle for patients with candidemia

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Objectives: Candidemia has become one of the leading causes of healthcare-associated bloodstream infection, particularly in the intensive care

unit. The management of candidemia remains challenging. We reassessed the protective effectiveness of a comprehensive care bundle on the management of candidemia and the effects of compliance with each element on the outcomes of patients. **Methods:** This network meta-analysis was conducted using the frequentist method. The participants included adult patients both infected with candidemia and who received bundle care. The primary outcome was the all-cause mortality among the patients included. **Results:** Studies in which a care bundle was created for patients with candidemia were identified, and 5 eligible studies with 5,808 participants were enrolled for further analysis. The random-effects model of the overall odds ratio (OR) revealed a significant reduction in the risk of all-cause mortality compared with that of the controls (OR, 0.599; 95% CI, 0.378–0.949; $P = .025$), as well as a reduction in the risk of developing persistent candidemia compared with the controls (OR, 0.483; 95% CI, 0.245–0.952; $P = .008$). In addition, no single element reached a protective effectiveness to improve the clinical outcome. **Conclusions:** This meta-analysis demonstrated that the combination of core elements in the care bundle resulted in protective effects, in that the all-cause mortality rates and incidence rates were effectively reduced among patients with persistent candidemia.

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Reducing bacterial contamination in the dental unit waterline (DUWL) in dental clinics

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Objectives: We evaluated the effectiveness of using appropriate chemical(s) to treat the dental unit waterline (DUWL), and we recommended appropriate strategies to manage the DUWL system to maintain bacteria concentration below minimum recommended levels. **Methods:** Initial water samples were collected aseptically from the handpieces of the DUWL in dental clinics to assess the bacterial load prior to treatment of the dental unit. The dental staff were educated on the management and treatment of the DUWL. Appropriate chemicals were introduced to the DUWL system. Following the treatment, samples of water from the DUWLs were collected to assess the bacterial load. **Results:** The US CDC recommends a safe level of bacterial load of <500 CFU per mL of heterotrophic bacteria in the standard for drinking water by the US EPA. Initial results for the DUWL water showed unacceptably high levels of bacterial load between 1,930 and 35,000 CFU per mL prior to treatment. Subsequent sampling of DUWL water with treatment of appropriate chemicals showed vast reductions of the bacterial loads in all the dental units, with bacterial counts between <1 and 72 CFU per mL. **Conclusions:** It is important to ensure ongoing education and regular treatment with appropriate chemical and effective management and monitoring of all DUWLs from dental chairs to ensure that the water produced meets safe drinking standards.

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Subject Category: Multidrug-Resistant (MDR) Organisms

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Surveillance and control efforts for carbapenemase-producing gram-negative bacteria at a high-burden tertiary-care healthcare facility in Ho Chi Minh City, Vietnam

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