compliance and performance characteristics of SCNS vs. HCWC for respiratory pathogens during 2019-2020 flu season.

**Methods.** Adult Military Health System (MHS) beneficiaries were enrolled in an influenza vaccine effectiveness trial (PAIVED). Following vaccination, subjects were instructed on SCNS and completion of a symptom diary and were contacted weekly to ascertain ILI symptoms (fever, sore throat, and/or cough). In the event of an ILI, subjects completed the symptom diary and SCNS and were scheduled a clinic visit for HCWC. Swabs were tested with the Lumixen NxtAG™ Respiratory Pathogen Panel. We evaluated compliance with swab collection, positive percent agreement (PPA) of SCNS using PCR detection from either HCWC or SCNS as the reference standard, and agreement between paired swabs using the Cohen Kappa coefficient (κ).

**Results.** 1808 ILI were reported by 972 participants enrolled during the study period. Compliance with HCWC was higher than SCNS (58% [1042] vs. 42% [766]; p < 0.001). SCNS were associated with a shorter interval from symptom onset (median: 4 days [IQR:2-6 days] vs. clinic collect: 7 days [IQR:4-9 days]; p < 0.001). 663 paired swabs were available for 609 participants (Table 1). The overall detection rate was higher in SCNS (36%) than HCWC (26%; p < 0.001) (Figure 1). The overall PPA was 85.7% and a PPA of approximately 80% of greater was observed for influenza, rhinoenterovirus, parainfluenza and respiratory syncytial virus. Agreement between paired swabs was poor due to the lower detection rates in HCWC.

Table 1. Demographics and swab collection data for 609 participants who provided 663 paired swabs

| Characteristic | N     |
|---------------|-------|
| No. of paired swabs per unique participant (1 paired swab per ILD) |       |
| One           | 560   |
| Two           | 44    |
| Three         | 5     |
| AGE           |       |
| Median        | 35.8  |
| Range         | 19-83.9 |
| SEX           |       |
| Female        | 291 (47.8%) |
| Male          | 311 (22.7%) |
| RACE-ETHNICITY|       |
| Black         | 73 (12.0%) |
| Hispanic      | 139 (21.9%) |
| White         | 353 (58.0%) |
| Other         | 74 (12.2%) |
| MILITARY STATUS|      |
| Active Duty   | 381 (62.6%) |
| Dependent     | 131 (21.5%) |
| Retired       | 97 (15.9%) |

Figure 1. Detection by pathogen in 663 paired swabs

**Conclusion.** SCNS were associated with higher detection rates compared to HCWC, likely due to the shorter interval between symptom onset and swab collection. Strategies to improve compliance with SCNS and minimize the interval between symptom onset and swab collection are needed to optimize detection of respiratory pathogens in this MHS cohort.

**Disclosures.** Ryan C. Maves, MD; EMD Serono (Advisor or Review Panel member); Heron Therapeutics (Advisor or Review Panel member) Jitu Modi, MD, GSK (Speaker's Bureau)

678. Rapid Molecular SARS-CoV-2 Detection by Abbott ID NOW Is Reliable in Pediatric Patients

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**Session:** P-31. Diagnostics: Virology

**Background.** The COVID-19 Pandemic demonstrated the importance of rapid, accurate, point of care testing to control spread of the virus. The availability of this testing has been crucial to re-opening schools, keeping children safely in schools, and returning children to school quickly following illness. The Abbott ID NOW molecular assay to detect SARS-CoV-2 was granted Emergency Use Authorization in March 2020. Reports of lower sensitivity compared with conventional PCR prompted some school districts to require confirmatory conventional PCR for negative rapid molecular results to return children to school. In this study we aim to determine the sensitivity and specificity of the Abbott ID NOW molecular SARS-CoV-2 test in a large pediatric primary care practice.

**Methods.** A retrospective observational study was performed using data from 25 pediatric primary care sites in the Boston Children's Health Physicians network, a large multispecialty pediatric practice in New York and Connecticut. Data were extracted from the electronic health record for all patients 0-22 years of age who had an Abbott ID NOW rapid molecular COVID-19 assay from October 1, 2020 - February 28, 2021. For all patients with rapid tests, we identified patients who had a conventional PCR test sent within 1 day before or 1 day after the ID NOW test. The result of the conventional PCR test was considered the “true” result. All discrepant test results were identified.

**Results.** During the study period, 14993 patients had ID NOW testing performed. The percent positivity was 8.5%. The percent positivity in our practices paralleled that in the surrounding community throughout the winter surge of COVID-19. 500 patients had confirmatory testing sent within 1 day before or after the ID NOW test (15 positive and 485 negative results). Based on the conventional PCR test results, 2 of 15 positive results were false positive and only 1 of 485 negative results was a false negative, resulting in a sensitivity of 93% and specificity of 99.6%. The false negative result was in a patient with nasal congestion whose mother was COVID positive.

**Conclusion.** Rapid, molecular, point of care testing is an important tool to identify SARS-CoV-2 in pediatric patients and limit school absences. The ID NOW assay is highly sensitive and specific in a real-world pediatric setting.

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679. Infective Endocarditis and Septic Emboli-Related Complications: Epidemiology and Impacts on Hospital Outcomes.

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**Session:** P-32. Endocarditis

**Background.** Infectious endocarditis (IE) remains a disease of high mortality, complications and a severe burden to the healthcare system despite advances in diagnostic techniques and treatments. There are several investigations of IE using a nation-based population cohort, however, with limited focus on septic emboli-related complications.

**Methods.** We used the 2016 to 2018 National Readmission Database (NRD) to identify a primary diagnosis of admissions among adults (Age ≥18) with IE. International Statistical Classification (ICD-10) codes were used to identify patients with a primary diagnosis of IE who experienced in-hospital septic emboli-related complications. Primary outcomes were mortality, length of stay, total cost and 30-day all-cause readmission. Uni- and Multivariate Linear, Logistic and Cox regression were used to assess statistical significance and a two-sided p-value less than 0.05 was considered significant.