Supplemental Material for “Contrasting Definitions and Incidence of Healthcare-Associated Respiratory Viral Infections in a Pediatric Hospital”

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| **Supplemental Table S1:** Demographics of patients with healthcare-associated respiratory viral infections by year |
|  | **Year, no. (%)** |  |
| **Characteristic** | **2013-14** | **2014-15** | **2015-16** | **2016-17** | **2017-18** | ***P*a** |
| **No. HARVI** | 89 | 86 | 95 | 97 | 131 |  |
| **Rate (95% CI) per 1,000 patient-days** | 0.94 (0.76 to 1.16) | 0.84 (0.68 to 1.04) | 0.92(0.75 to 1.12) | 0.94 (0.77 to 1.14) | 1.24 (1.04 to 1.47) | 0.05 |
| **Age, median (IQR), yrs** | 1.8 (0.4 to 6.8) | 1.0 (0.2 to 3.4) | 1.5 (0.5 to 4.2) | 1.2 (0.4 to 5.4) | 1.3 (0.4 to 5.9) | 0.57 |
| **Female** | 38 (42.7) | 41 (47.7) | 53 (55.8) | 45 (46.4) | 59 (45.0) | 0.43 |
| **Race** |  |  |  |  |  | 0.58 |
| **White** | 56 (62.9) | 49 (57.0) | 56 (59.0) | 64 (66.0) | 78 (59.5) |  |
| **Black** | 14 (15.7) | 23 (26.7) | 26 (27.3) | 15 (15.5) | 26 (19.9) |  |
| **Asian** | 5 (5.6) | 3 (3.5) | 4 (4.2) | 4 (4.1) | 4 (3.1) |  |
| **Other** | 15 (15.7) | 11 (12.8) | 9 (9.5) | 14 (14.4) | 23 (17.6) |  |
| **Hispanic ethnicity** | 36 (40.5) | 35 (40.7) | 41 (43.2) | 39 (40.2) | 60 (45.8) | 0.93 |
| **Obesityb** | 15 (16.9) | 6 (7.0) | 10 (10.5) | 12 (12.3) | 18 (13.7) | 0.34 |
| **Pretermc** | 9 (10.1) | 14 (16.3) | 16 (16.8) | 12 (12.4) | 20 (15.3) | 0.65 |
| **CLD** | 22 (24.7) | 21 (24.4) | 21 (22.1) | 17 (17.5) | 44 (33.6) | 0.08 |
| **Asthma** | 2 (2.3) | 0 (0) | 1 (1.1) | 1 (1.0) | 5 (3.8) | 0.32 |
| **CHD** | 7 (7.9) | 9 (10.5) | 10 (10.5) | 9 (9.3) | 23 (17.6) | 0.17 |
| **Immunodeficiency** | 19 (21.4) | 24 (27.9) | 21 (22.1) | 33 (34.0) | 27 (20.6) | 0.14 |
| **Unit** |  |  |  |  |  | 0.31 |
| **Non-ICU** | 63 (70.8) | 63 (73.3) | 66 (69.5) | 64 (66.0) | 82 (62.6) |  |
| **NICU** | 5 (5.6) | 13 (15.1) | 7 (7.4) | 9 (9.3) | 17 (13.0) |  |
| **CVICU** | 4 (4.5) | 4 (4.7) | 6 (6.3) | 8 (8.3) | 11 (8.4) |  |
| **PICU** | 17 (19.1) | 6 (7.0) | 16 (16.8) | 16 (16.5) | 21 (16.0) |  |
| **LOS Prior, median (IQR), days** | 9 (5 to 24) | 12.5 (6 to 40) | 11 (5 to 25) | 10 (5 to 33) | 12 (5 to 37) | 0.41 |
| **CCC Score, median (IQR)** | 1 (0 to 2) | 1 (1 to 2) | 1 (1 to 3) | 1 (0 to 2) | 1 (0 to 2) | 0.39 |
| **PELOD2 Score, median (IQR)** | 1 (0 to 3) | 1 (0 to 3) | 2 (0 to 3) | 0 (0 to 3) | 0 (0 to 2) | 0.42 |

Each year starts on July 1 and ends on June 30

Includes possible and definite cases by the primary study definition

a – calculated by chi-squared test, Fisher exact test, Kruskal-Wallis test, or likelihood ratio test

HARVI – healthcare associated respiratory viral infection

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| **Supplemental Table S2**. Characteristics of negative viral tests that occurred before a subsequent HARVI |
| HARVI type | No. HARVI | No. individuals with a prior negative test (%) | Total no. prior negative tests | Median length of stay prior to negative test, days (IQR) | Median duration between negative and first positive test, days (IQR) |
| Total | 498 | 143 (28.7%) | 332 | 30 (4 - 90) | 33 (13 – 91.5) |
| Definite | 320 | 113 (35.3%) | 299 | 36 (11 – 97) | 40 (18 – 101) |
| Possible | 178 | 30 (16.9%) | 33 | 1 (1 – 2) | 5 (3 – 6) |
| HARVI – healthcare-associated respiratory viral infection |  |