Table 3. Care for the critically ill pediatric oncology patient

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| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **All hospitals (n=75)** | **Northern**  **(n=4)** | **Eastern**  **(n=11)** | **Central**  **(n=34)** | **Southern**  **(n=18)** | **UK**  **(n=8)** |
| **General PICU Protocols, n (%)**  VAP prevention  Central line–associated bloodstream  infection prevention  Urine tract-infection prevention  Sepsis management  Weaning from MV  Lung protective ventilation  Non-invasive ventilation protocol  Sedation in patients with MV  Early mobilization  Nutritional protocols  Antimicrobial stewardship program | 45 (60)  68 (91)  38 (51)  68 (91)  41 (55)  51 (68)  51 (68)  59 (79)  36 (48)  64 (85)  58 (77) | 2 (50)  3 (75)  1 (25)  4 (100)  2 (50)  2 (50)  3 (75)  2 (50)  3 (75)  4 (100)  4 (100) | 7 (64)  10 (91)  10 (91)  10 (91)  6 (55)  6 (55)  8 (73)  7 (64)  7 (64)  11 (100)  7 (64) | 16 (47)  30 (88)  13 (38)  30 (88)  19 (56)  27 (79)  21 (62)  28 (82)  17 (50)  26 (76)  22 (65) | 14 (78)  17 (94)  12 (67)  16 (89)  10 (56)  11 (61)  13 (72)  15 (83)  4 (22)  16 (89)  17 (94) | 6 (75)  8 (100)  2 (25)  8 (100)  4 (50)  5 (63)  6 (75)  7 (88)  5 (63)  7 (88)  8 (100) |
| **Specific Oncology PICU protocols, n (%)**  Febrile neutropenia  Invasive fungal infections  Tumor lysis syndrome  Chemotherapy at the PICU  Other8 | 25 (33)  19 (25)  24 (32)  18 (24)  4 (5) | 1 (25)  1 (25)  0  0  0 | 4 (36)  3 (27)  4 (36)  3 (27)  1 (9) | 11 (32)  10 (29)  12 (35)  9 (26)  1 (3) | 5 (28)  3 (17)  5 (28)  3 (17)  2 (11) | 4 (50)  2 (25)  3 (38)  3 (38)  1 (13) |
| **Chemotherapy at the PICU, n (%)** | 74 (99) | 4 (100) | 10 (91) | 34 (100) | 18 (100) | 8 (100) |
| **PEWS, n (%)** | 31 (41) | 2 (50) | 6 (55) | 6 (18) | 9 (50) | 8 (100) |
| **Daily rounds PICU physicians at the oncology and HSCT wards, n (%)** | 10 (13) | 1 (25) | 0 | 5 (15) | 4 (22) | 0 |
| **Daily rounds of the oncologists at the PICU, n (%)** | 70 (93) | 4 (100) | 8 (73) | 34 (100) | 16 (89) | 8 (100) |
| **Discussions, n (%)**  Mortality discussions  Complication discussions  Complex-patient discussions | 23 (31)  29 (39)  37 (49) | 1 (25)  1 (25)  2 (50) | 3 (27)  4 (36)  3 (27) | 8 (24)  10 (29)  14 (41) | 7 (39)  9 (50)  13 (72) | 4 (50)  5 (63)  5 (63) |
| **Rapid response team, n (%)** | 58 (77) | 3 (75) | 11 (100) | 27 (79) | 11 (61) | 6 (75) |
| **Cardiac-arrest team, n (%)** | 62 (83) | 4 (100) | 9 (82) | 30 (88) | 12 (67) | 7 (88) |
| **Respiratory support at the oncology/HSCT ward, n (%)**  Yes  HFNC  NIV CPAP/BiPAP  Established long term ventilation via  tracheostomy | 28 (37)  27 (36)  6 (8)  7 (9) | 3 (75)  3 (75)  2 (50)  1 (25) | 2 (18)  1 (9)  0  1 (9) | 9 (26)  9 (26)  1 (3)  1 (3) | 10 (56)  10 (56)  3 (17)  4 (22) | 4 (50)  4 (50)  0  0 |
| **Vaso-active support at the oncology/HSCT ward, n (%)** | 10 (13) | 1 (25) | 0 | 4 (12) | 5 (28) | 0 |
| **Renal replacement therapy at the oncology/HSCT ward, n (%)** | 13 (17) | 1 (25) | 5 (45) | 3 (9) | 2 (11) | 1 (13) |
| **Palliation service, n (%)** | 64 (85) | 3 (75) | 8 (73) | 31 (91) | 15 (83) | 7 (88) |
| **Pain management service, n (%)** | 70 (93) | 4 (100) | 11 (100) | 33 (97) | 14 (78) | 8 (100) |
| **Psychological service, n (%)** | 74 (99) | 4 (100) | 11 (100) | 34 (100) | 17 (94) | 8 (100) |
| **Change of goals of care, n (%)**  Both at the PICU and ward  At the ward  At the PICU  Outpatient clinic | 48 (64)  20 (27)  5 (7)  2 (3) | 1 (25)  3 (75)  1 (25)  1 (25) | 6 (55)  4 (36)  0  1 (9) | 21 (62)  10 (29)  3 (9)  1 (3) | 14 (78)  2 (11)  1 (6)  1 (6) | 6 (75)  1 (13)  1 (13)  0 |
| **PICU consultants involved in goals of care discussion, n (%)**  Yes  No  Sometimes | 45 (60)  4 (5)  26 (35) | 1 (25)  0  3 (75) | 4 (36)  1 (9)  6 (55) | 21 (62)  2 (6)  11 (32) | 14 (78)  1 (6)  3 (17) | 5 (63)  0  3 (37) |
| Abbreviations BiPAP, Bilevel Positive Airway Pressure, CPAP, continuous positive airway pressure, HFNC, high flow nasal cannula, HSCT, hematopoietic stem cell transplantation, MV mechanical ventilation, NIV non-invasive ventilation, PEWS pediatric early warning score, PICU pediatric intensive care unit, VAP ventilator associated pneumoniae  \*CAR-T cell protocol, Cytokine release syndrome, Antimicrobial therapy specific for oncology and HSCT patients, PICU admission criteria | | | | | | |