NTG Annual Transport Data 2019/20

Colin Devon (data analyst) and Allan Jackson (consultant neonatologist)

ScotSTAR
Method

• Email to transport service’s medical and nursing leads requesting activity data from 1.4.19 to 31.3.20

• Brief additional information about each service.
Reorganisations & additions for 2019/20 data

- No reorganisations in 2019/20
- 12 months of data from April 1st 2019 to March 31st 2020
  - Previous requests covered first 6 months of calendar year.
  - Informal review of service statistics showed lack of seasonality across the year in previous years

- Historical data returns have a simple 2x adjustment factor to allow for comparison with the most recent return when displayed in this document
Number of services, UK

- 2012 – data from 22
- 2013 – data from 21
- 2014 – data from 19
- 2015 – data from 19
- 2016 – data from 18
- 2017 – data from 18
- 2018 – data from 15
- 2019 – data from 15
- 2019/20 – data from 15

↓32%
All team annualised UK neonatal transport activity

2019-2020 data 12-month collection period, prior to that 6 months used
Contextualised national annual activity

UK Total Live Births

Total NTG Transfers
Although the total number of transfers appeared to peak in 2015, as a proportion of total live births the numbers of transfers continue to rise.
# UK Summary Data
**Apr 2019 to Mar 2020**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transfers</td>
<td>15291</td>
<td>15958</td>
<td>16171</td>
<td>15907</td>
<td>16051</td>
<td>15356</td>
<td>15702</td>
<td>15603</td>
</tr>
<tr>
<td>Ventilated</td>
<td>3965 (26%)</td>
<td>3941 (25%)</td>
<td>4358 (27%)</td>
<td>4022 (25%)</td>
<td>3868 (24%)</td>
<td>3921 (26%)</td>
<td>3777 (24%)</td>
<td>3677 (24%)</td>
</tr>
<tr>
<td>HFOV (% of vent')</td>
<td>-</td>
<td>-</td>
<td>32 (&lt;1%)</td>
<td>32 (&lt;1%)</td>
<td>79 (2%)</td>
<td>97 (2.5%)</td>
<td>109 (3%)</td>
<td>102 (3%)</td>
</tr>
<tr>
<td>CPAP</td>
<td>1832 (12%)</td>
<td>1640 (10%)</td>
<td>1597 (10%)</td>
<td>1482 (9%)</td>
<td>1256 (8%)</td>
<td>1070 (7%)</td>
<td>1070 (7%)</td>
<td>1070 (7%)</td>
</tr>
<tr>
<td>High-flow</td>
<td>-</td>
<td>-</td>
<td>904 (6%)</td>
<td>992 (6%)</td>
<td>1348 (9%)</td>
<td>1532 (10%)</td>
<td>1712 (11%)</td>
<td>1712 (11%)</td>
</tr>
<tr>
<td>Cooling</td>
<td>582 (4%)</td>
<td>504 (3%)</td>
<td>554 (3%)</td>
<td>579 (4%)</td>
<td>495 (3%)</td>
<td>516 (3%)</td>
<td>568 (4%)</td>
<td>541 (3.5%)</td>
</tr>
<tr>
<td>iNO</td>
<td>222 (1%)</td>
<td>234 (1%)</td>
<td>276 (2%)</td>
<td>296 (2%)</td>
<td>308 (2%)</td>
<td>314 (2%)</td>
<td>293 (2%)</td>
<td>293 (2%)</td>
</tr>
<tr>
<td>Palliative</td>
<td>38 (&lt;1%)</td>
<td>38 (&lt;1%)</td>
<td>66 (&lt;1%)</td>
<td>67 (&lt;1%)</td>
<td>40 (&lt;1%)</td>
<td>49 (&lt;1%)</td>
<td>62 (&lt;1%)</td>
<td>62 (&lt;1%)</td>
</tr>
</tbody>
</table>
Total Transfers/team
Apr 2019 to Mar 2020

- ScotSTAR: 1193
- NISTAR: 533
- NNeTS: 965
- Connect NW: 1836
- Embrace: 1533
- CenTre: 1554
- KIDS NTS: 1472
- ANTS: 1250
- N Wales NTS: 168
- CHANTS: 485
- SONeT: 979
- NEST: 626
- London NTS: 1575
- KSS: 1059
- Peninsula: 375
Changes in activity by team, 2019 adjusted v 2019/20

<table>
<thead>
<tr>
<th>Team</th>
<th>ScotSTAR</th>
<th>NISTAR</th>
<th>NNeTS</th>
<th>Connect</th>
<th>Embrace</th>
<th>CenTre</th>
<th>KIDS NTS</th>
<th>ANTS</th>
<th>N Wales NTS</th>
<th>CHANTS</th>
<th>SONeT</th>
<th>NEST</th>
<th>London NTS</th>
<th>KSS</th>
<th>Peninsula</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.1%</td>
<td>2.4%</td>
<td>3.7%</td>
<td>4.5%</td>
<td>6.0%</td>
<td>0.2%</td>
<td>5.2%</td>
<td>9.5%</td>
<td>3.7%</td>
<td>3.6%</td>
<td>1.3%</td>
<td>2.8%</td>
<td>10.4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nb estimates based on 6 months of 2019 data, assuming no seasonality to allow for basic comparison to 2019/20. There is overlap in this data as well April-June 2019.
Trends in transfer number by team, 2014-2020

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Ventilated Transfers by team
Apr 2019 to Mar 2020

<table>
<thead>
<tr>
<th>Team</th>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>168</td>
</tr>
<tr>
<td>NISTAR</td>
<td>100</td>
</tr>
<tr>
<td>NNeTS</td>
<td>261</td>
</tr>
<tr>
<td>Connect NW</td>
<td>371</td>
</tr>
<tr>
<td>Embrace</td>
<td>311</td>
</tr>
<tr>
<td>CenTre</td>
<td>319</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>371</td>
</tr>
<tr>
<td>ANTS</td>
<td>311</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>18</td>
</tr>
<tr>
<td>CHANTS</td>
<td>91</td>
</tr>
<tr>
<td>SONeT</td>
<td>196</td>
</tr>
<tr>
<td>NEST</td>
<td>271</td>
</tr>
<tr>
<td>London NTS</td>
<td>566</td>
</tr>
<tr>
<td>KSS</td>
<td>253</td>
</tr>
<tr>
<td>Peninsula</td>
<td>70</td>
</tr>
</tbody>
</table>
Ventilated Transfers as a percentage of total transfers, by team Apr 2019 to Mar 2020

- ScotSTAR: 14%
- NISTAR: 19%
- NNeTS: 27%
- Connect NW: 20%
- Embrace: 20%
- CenTre: 21%
- KIDS NTS: 25%
- ANTS: 25%
- N Wales NTS: 11%
- CHANTS: 19%
- SONeT: 20%
- NEST: 43%
- London NTS: 36%
- KSS: 24%
- Peninsula: 19%
Trends in numbers of ventilated transfer by team 2014-2020

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Ventilated transfers as percentage of total transfers, by team 2014-20
High Frequency Oscillatory Ventilation Transfers by team Apr 2019 to Mar 2020

ScotSTAR  4
NISTAR  0
NNeTS  25
Connect NW  1
Embrace  0
CenTre  0
KIDS NTS  1
ANTS  0
N Wales NTS  0
CHANTS  12
SONeT  5
NEST  54
London NTS  1
KSS  0
Peninsula  0
High Frequency Oscillatory Ventilation Transfers as a percentage of ventilated transfers, by team Apr 2019 to Mar 2020

- ScotSTAR: 2.4%
- NISTAR: 0%
- NNeTS: 0%
- Connect NW: 6.7%
- Embrace: 0%
- CenTre: 0%
- KIDS NTS: 0.3%
- ANTS: 0.0%
- N Wales NTS: 0.0%
- CHANTS: 6.1%
- SOneT: 9.5%
- NEST: 1.8%
- London NTS: 0.4%
- KSS: 0.0%
- Peninsula: 0.0%
Trends in numbers on High Frequency Oscillatory Ventilation by team, 2014-2020

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in High Frequency Oscillatory Ventilation transfers as a percentage of ventilated transfers by team 2014-20
CPAP Transfers by team
Apr 2019 to Mar 2020

ScotSTAR 54
NISTAR 146
NNeTS 96
Connect NW 73
Embrace 71
CenTre 173
KIDS NTS 78
ANTS 67
N Wales NTS 15
CHANTS 32
SONeT 15
NEST 68
London NTS 89
KSS 74
Peninsula 19
CPAP Transfers by team as a percentage of total transfers
Apr 2019 to Mar 2020

- ScotSTAR: 4.5%
- NISTAR: 27.4%
- NNeTS: 9.9%
- Connect NW: 4.0%
- Embrace: 4.6%
- CenTre: 11.1%
- KIDS NTS: 5.3%
- ANTS: 5.4%
- N Wales NTS: 8.9%
- CHANTS: 6.6%
- SONEt: 1.5%
- NEST: 10.9%
- London NTS: 5.7%
- KSS: 7.0%
- Peninsula: 5.1%
Trends in CPAP transfers as a percentage of total transfers, by team, 2014-2020
High-flow transfers by team
Apr 2019 to Mar 2020
High-flow transfers by team as a percentage of total transfers
Apr 2019 to Mar 2020

ScotSTAR 11%
NISTAR 6%
NNeTS 1%
Connect NW 11%
Embrace 15%
CenTre 4%
KIDS NTS 8%
ANTS 21%
N Wales NTS 10%
CHANTS 20%SONeT 18%NEST 9%London NTS 12%KSS 9%Peninsula 13%
Trends in numbers of High-Flow transfers by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in High-Flow transfers as a percentage of total transfers, by team, 2014-20
Therapeutic hypothermia transfers with by team Apr 2019 to Mar 2020

ScotSTAR 18
NISTAR 21
NNeTS 62
Connect NW 28
Embrace 41
CenTre 31
KIDS NTS 61
ANTS 89
N Wales NTS 13
CHANTS 45
SONeT 63
NEST 51
London NTS
KSS
Peninsula 16
Therapeutic hypothermia transfers as a percentage of total transfer by team, Apr 2019 to Mar 2020

1.5% 0.0% 2.2% 3.4% 1.8% 2.6% 2.1% 4.9% 1.2% 2.7% 4.6% 10.1% 5.7% 4.8% 4.3%

ScotSTAR NISTAR NNeTS Connect NW Embrace CenTre KIDS NTS ANTS N Wales NTS CHANTS SONeT NEST London NTS KSS Peninsula
Trends in numbers of therapeutic hypothermia transfers by team 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in therapeutic hypothermia transfers as a percentage of total transfers, by team 2014-20
Transfers using inhaled Nitric Oxide by team Apr 2019 to Mar 2020
Nitric Oxide Transfers by team as a percentage of total transfers
Apr 2019 to Mar 2020

1.3% 0.0% 2.5% 1.5% 1.4% 0.8% 1.9% 1.5% 0.8% 3.7% 3.0% 4.4% 0% 1% 2% 3% 4% 5%

ScotSTAR  NISTAR  NNeTS  Connect NW  Embrace  CenTre  KIDS NTS  ANTS  N Wales NTS  CHANTS  SONeT  NEST  London NTS  KSS  Peninsula
Trends in numbers of Nitric oxide transfers by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in nitric oxide transfers as a percentage of total transfers, by team 2014-20
Transfers for palliative care by team Apr 2019 to Mar 2020
Palliative Care Transfers as a percentage of total transfers, by team Apr 2019 to Mar 2020

- ScotSTAR: 0.50%
- NISTAR: 0.19%
- NNeTS: 0.21%
- Connect NW: 0.22%
- Embrace: 0.72%
- CenTre: 0.06%
- KIDS NTS: 0.07%
- ANTS: 0.88%
- N Wales NTS: 1.03%
- CHANTS: 0.72%
- SONeT: 0.51%
- NEST: 0.47%
- London NTS: 0.47%
- KSS: 0.47%
- Peninsula:
Trends in numbers of palliative care transfers by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in palliative care transfers as a percentage of total transfers, by team 2014-20
### Air Transfers by team
#### Apr 2019 to Mar 2020

<table>
<thead>
<tr>
<th>Team</th>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>80</td>
</tr>
<tr>
<td>NISTAR</td>
<td>0</td>
</tr>
<tr>
<td>NNeTS</td>
<td>0</td>
</tr>
<tr>
<td>ConnecNW</td>
<td>0</td>
</tr>
<tr>
<td>Embrace</td>
<td>27</td>
</tr>
<tr>
<td>CenTre</td>
<td>0</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>0</td>
</tr>
<tr>
<td>ANTS</td>
<td>0</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>0</td>
</tr>
<tr>
<td>CHANTS</td>
<td>26</td>
</tr>
<tr>
<td>SOnET</td>
<td>12</td>
</tr>
<tr>
<td>NEST</td>
<td>12</td>
</tr>
<tr>
<td>London NTS</td>
<td>17</td>
</tr>
<tr>
<td>KSS</td>
<td>0</td>
</tr>
<tr>
<td>Peninsula</td>
<td>0</td>
</tr>
</tbody>
</table>

---

**Notes:**
- The data includes air transfers from Apr 2019 to Mar 2020.
- ScotSTAR has the highest number of transfers with 80.
Air Transfers by team as a percentage of total transfers Apr 2019 to Mar 2020

- ScotSTAR: 6.7%
- NISTAR: 0.0%
- NNets: 0.0%
- Connect NW: 0.0%
- Embrace: 1.8%
- CenTre: 0.0%
- Kids NTS: 0.0%
- Ants: 0.0%
- N Wales NTS: 0.0%
- CHANTS: 5.4%
- Sonet: 1.2%
- NEST: 1.9%
- London NTS: 1.1%
- KSS: 0%
- Peninsula: 0%
Trends in numbers of air transfers by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in air transfers as a percentage of total transfers by team, 2014-20
Premature Newborn Infant Workload

Data on

- Transfer on first 3 days of birth
  - 22+0 weeks to 22+6 weeks (new)
  - 23+0 weeks to 26+6 weeks
  - 27+0 weeks to 31+6 weeks
  - 32+0 weeks to 36+6 weeks

- Operational reason for transfer
  - Uplift
  - Capacity
  - Repatriation
Premature infants transferred on the first 3 days of life for **Uplift** (2014-2019 adjusted), 2019/20
Premature infants transferred on the first 3 days of life for **Capacity** (2014-2019 adjusted), 2019/20
Premature infants transferred on the first 3 days of life for Repatriation (2014-2019 adjusted), 2019/20
2019/20 Uplift transfers by team, 1st 3 days of life, 22-34+6 week infants
2019/20 Uplift transfers by Team as a percentage of total transfers
1st 3 days of life, 22-34+6 weeks

<table>
<thead>
<tr>
<th>Team</th>
<th>Uplift 22+0 to 22+6 %</th>
<th>Uplift 23+0 to 26+6 %</th>
<th>Uplift 27+0 to 31+6 %</th>
<th>Uplift 32+0 to 34+6 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NISTAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNeTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connect NW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embrace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CenTre</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIDS NTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Wales NTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHANTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SONeT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEST</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London NTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peninsula</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trends in uplift transfers, 1st 3 days of life, 23-26+6 week infants, by team Jan-Jun 2014 – 2019 adj’, 2019/20
Trends in uplift transfers, 1st 3 days of life, 27-31+6 week infants, by team Jan-Jun 2014 – 2019 adj’, 2019/20
Trends in uplift transfers, 1st 3 days of life, 32-34+6 week infants, Jan-Jun 2019 adj’, 2019/20

This information has only been gathered for this gestational group in 2019 and 2020
2019/20 Capacity transfers
1st 3 days of life, 22-31\(^{+6}\) week infants

ScotSTAR
NISTAR
NNeTS
Connect NW
Embrace
CenTre
KIDS NTS
ANTS
N Wales NTS
CHANTS
SONeT
NEST
London NTS
KSS
Peninsula

Capacity 22+0 to 22+6
Capacity 23+0 to 26+6
Capacity 27+0 to 31+6
Capacity 32+0 to 34+6
2019/20 Capacity transfers by Team as percentage of total transfers, 1st 3 days of life, 22-34+6 weeks

This information has only been gathered for this gestational group in 2019 and 2020
2019/20 Repatriation transfers by team, 22-34+6 weeks gestation
2019/20 Repatriation transfers by team, 22-34+6 weeks gestation

- ScotSTAR
- NISTAR
- NNeTS
- Connect NW
- Embrace
- CenTre
- KIDS NTS
- ANTS
- N Wales NTS
- CHANTS
- SONeT
- NEST
- London NTS
- KSS
- Peninsula

- Repatriation 22+0 to 22+6
- Repatriation 23+0 to 26+6
- Repatriation 27+0 to 31+6
- Repatriation 32+0 to 34+6
Temperature on completion of transfer

– Preterm uplift transfers in the first day of life*
  • 22-31+6 weeks gestation

– Temperature Breakdown
  • Less than 36.5 degrees
  • 36.5 to 37.5 degrees
  • Greater than 37.5 degrees

*nb due to an error on the initial data collection form this was not clear and one service was unable to provide this information subsequent to the error being noted
Temperatures on completion/team
Apr 2019 to Mar 2020

* Embrace data using different denominator due to an error in the initial data collection form
* Embrace data using different denominator due to an error in the initial data collection form
Temperature on completion of transfer- stacked

- <36.5 deg C
- 36.5-37.5 deg C
- >37.5 deg C
Parents travelling

Data on

– Parents travelling with the baby simplified from last year
Parents travel/team
Apr 2019 to Mar 2020

ScotSTAR: 719
NISTAR: 237
NNeTS: 299
Connect NW: 345
Embrace: 617
CenTre: 313
KIDS NTS: 616
ANTS: 583
N Wales NTS: 71
CHANTS: 89
SONeT: 419
NEST: 248
London NTS: 756
KSS: 496
Peninsula: 169
Parents travelling as a percentage of total transfers by team Apr 2019 to Mar 2020

- ScotSTAR: 60.3%
- NISTAR: 44.5%
- NNeTS: 31.0%
- Connect NW: 18.8%
- Embrace: 20.1%
- CenTre: 40.2%
- KIDS NTS: 41.8%
- ANTS: 46.6%
- N Wales NTS: 42.3%
- CHANTS: 18.4%
- SONeT: 42.8%
- NEST: 39.6%
- London NTS: 48.0%
- KSS: 46.8%
- Peninsula: 45.1%

Teams: ScotSTAR, NISTAR, NNeTS, Connect NW, Embrace, CenTre, KIDS NTS, ANTS, N Wales NTS, CHANTS, SONeT, NEST, London NTS, KSS, Peninsula.
Trends in numbers of parents travelling during transfers by team 2019-20
Trends in parent travelling during transfers, by team as a percentage of total transfers 2019-20

- ScotSTAR
- NISTAR
- NNeTS
- Connect NW
- Embrace
- Centre
- KIDS NTS
- ANTS
- N Wales NTS
- CHANTS
- SONeT
- NEST
- London NTS
- KSS
- Peninsula

2019

2019/20
Response standards

Data on

- Time critical transfers
  - Standard- to be mobile within 60 minutes of referral
  - Benchmarked conditions*:
    - Gastroschisis
    - Ventilated infant with Tracheo-oesophageal fistula +/- atresia
    - Intestinal perforation
    - Suspected duct-dependent cardiac lesion not responding to prostin
    - Unstable respiratory or cardiovascular failure not responding to appropriate management:

- Referral response time for ICU uplift transfers (excluding elective referrals)
  - Standard- to be at the referring centre cotside within 3.5 hours of referral

- Uplift transfers within catchment performed by commissioned team
  - Standard: 100%

*nb this is not a complete list of situations where a team will be required to deploy within one hour, but a defined group used for benchmarking purposes.
Time Critical transfers/team
Apr 2019 to Mar 2020

[Bar chart showing the number of time critical transfers for each team from April 2019 to March 2020. The chart includes teams such as ScotSTAR, NISTAR, NNeTS, Connect NW, Embrace, CenTre, KIDS NTS, ANTS, N Wales NTS, CHANTS, SONEt, NEST, London NTS, KSS, and Peninsula. The number of transfers ranges from 4 to 132.]
Time Critical transfers by team as a percentage of total transfer 2019-20

<table>
<thead>
<tr>
<th>Team</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>1.9%</td>
</tr>
<tr>
<td>NISTAR</td>
<td>0.8%</td>
</tr>
<tr>
<td>NNeTS</td>
<td>2.4%</td>
</tr>
<tr>
<td>Connect NW</td>
<td>3.5%</td>
</tr>
<tr>
<td>Embrace</td>
<td>2.4%</td>
</tr>
<tr>
<td>CenTre</td>
<td>2.1%</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>4.6%</td>
</tr>
<tr>
<td>ANTS</td>
<td>3.7%</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>1.8%</td>
</tr>
<tr>
<td>CHANTS</td>
<td>2.3%</td>
</tr>
<tr>
<td>SONeT</td>
<td>5.6%</td>
</tr>
<tr>
<td>NEST</td>
<td>7.7%</td>
</tr>
<tr>
<td>London NTS</td>
<td>8.4%</td>
</tr>
<tr>
<td>KSS</td>
<td>5.1%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>1.9%</td>
</tr>
</tbody>
</table>
Trends in numbers of Time Critical transfers by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Time Critical transfers as a percentage of total transfers, by team, 2014-20
% of Time Critical transfers dispatched within 60 minutes by team Apr 2019 to Mar 2020
Trends in percentage of Time Critical transfers dispatched within 60 minutes by team, 2014-20
Team Area Uplift Transfers

Data on

– Dedicated Neonatal Team Transfers in Area
– Uplift Transfers
– 95% of uplift transfers within area by dedicated team
Numbers of Uplift transfers in dedicated area 2019/20

- ScotSTAR: 616
- NISTAR: 98
- NNeTS: 386
- Connect NW: 826
- Embrace: 616
- CenTre: 651
- KIDS NTS: 755
- ANTS: 650
- N Wales NTS: 56
- CHANTS: 210
- SONeT: 437
- NEST: 303
- London NTS: 1292
- KSS: 458
- Peninsu la: 172
Numbers of Uplift transfers conducted by other teams in dedicated area

- ScotSTAR: 5
- NISTAR: 2
- NNeTS: 2
- Connect NW: 13
- Embrace: 8
- CenTre: 32
- KIDS NTS: 80
- ANTS: 91
- N Wales NTS: 80
- CHANTS: N
- SONeT: N
- NEST: N
- London NTS: 9
- KSS: 14
- Peninsula: N
Uplift transfers by Dedicated team in own area as a percentage of total uplift transfers
Trends in Uplift transfers by Dedicated team in own area, as a percentage of uplift transfers 2014-20
Number of Intensive care Uplift transfer by team, 2019-20

<table>
<thead>
<tr>
<th>Team</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>247</td>
</tr>
<tr>
<td>NISTAR</td>
<td>64</td>
</tr>
<tr>
<td>NNeTS</td>
<td>220</td>
</tr>
<tr>
<td>Connect NW</td>
<td>452</td>
</tr>
<tr>
<td>Embrace</td>
<td>185</td>
</tr>
<tr>
<td>CenTre</td>
<td>333</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>310</td>
</tr>
<tr>
<td>ANTS</td>
<td>364</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>29</td>
</tr>
<tr>
<td>CHANTS</td>
<td>120</td>
</tr>
<tr>
<td>SOnET</td>
<td>261</td>
</tr>
<tr>
<td>NEST</td>
<td>212</td>
</tr>
<tr>
<td>London NTS</td>
<td>728</td>
</tr>
<tr>
<td>KSS</td>
<td>308</td>
</tr>
<tr>
<td>Peninsula</td>
<td>76</td>
</tr>
</tbody>
</table>
Intensive care Uplift transfer as a percentage of total transfers

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>21%</td>
</tr>
<tr>
<td>NISTAR</td>
<td>12%</td>
</tr>
<tr>
<td>NNeTS</td>
<td>23%</td>
</tr>
<tr>
<td>Connect NW</td>
<td>25%</td>
</tr>
<tr>
<td>Embrace</td>
<td>12%</td>
</tr>
<tr>
<td>CenTre</td>
<td>21%</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>21%</td>
</tr>
<tr>
<td>ANTS</td>
<td>29%</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>17%</td>
</tr>
<tr>
<td>CHANTS</td>
<td>25%</td>
</tr>
<tr>
<td>SONE T</td>
<td>27%</td>
</tr>
<tr>
<td>NEST</td>
<td>34%</td>
</tr>
<tr>
<td>London NTS</td>
<td>46%</td>
</tr>
<tr>
<td>KSS</td>
<td>29%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>20%</td>
</tr>
</tbody>
</table>
Team arrived with the patient within 3.5 hours of the start of the referring call (Intensive care; uplift) as a percentage of ICU uplift transfers 2019/20

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>75%</td>
</tr>
<tr>
<td>NISTAR</td>
<td>100%</td>
</tr>
<tr>
<td>NNeTS</td>
<td>86%</td>
</tr>
<tr>
<td>Connect NW</td>
<td>68%</td>
</tr>
<tr>
<td>Embrace</td>
<td>80%</td>
</tr>
<tr>
<td>CenTre</td>
<td>88%</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>87%</td>
</tr>
<tr>
<td>ANTS</td>
<td>93%</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>89%</td>
</tr>
<tr>
<td>CHANTS</td>
<td>82%</td>
</tr>
<tr>
<td>SONeT</td>
<td>84%</td>
</tr>
<tr>
<td>NEST</td>
<td>81%</td>
</tr>
<tr>
<td>London NTS</td>
<td>94%</td>
</tr>
<tr>
<td>KSS</td>
<td>72%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>72%</td>
</tr>
</tbody>
</table>
Trends in team arrived with the patient within 3.5 hours of the start of the referring call (Intensive care; uplift) as a percentage of ICU uplift transfers by team, 2014-20.
% of records with stabilising times of the start of the referring call (Intensive care; uplift) (%), Jan-Jun/year.
Stabilising time (minutes), uplift/ICU transfers, by team
Median (25th & 75th centiles), 2019/20
Stabilising time (minutes), 2019/20, by team
Median (25th & 75th centiles), uplift/ICU transfers - ranked
Number of infants who are ventilated in transit by team Apr 2019 to Mar 2020
Infants who are ventilated in transit as a percentage of total transfers, by team Apr 2019 to Mar 2020.
Trends in numbers of infants ventilated in transit by team, 2014-20

Previous years are estimates assuming no seasonality to allow for basic comparison to 2019/20
Trends in infants ventilated in transit as a percentage of total transfer, by team 2014-20

[Bar chart showing trends over time for different teams, with percentage values on the y-axis and years from 2014 to 2019/20 on the x-axis. Each team is represented by a different color, and the chart includes labels for ScotSTAR, NISTAR, NNeTS, Connect NW, Embrace, Centre, KIDS NTS, ANTS, N Wales NTS, CHANTS, SONeT, NEST, London NTS, KSS, and Peninsula.]
Ventilated patients with a pCO\textsubscript{2} recorded on completion of transfer, as a percentage of ventilated transfers by team Apr 2019 to Mar 2020

<table>
<thead>
<tr>
<th>Team</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>19%</td>
</tr>
<tr>
<td>NISTAR</td>
<td>89%</td>
</tr>
<tr>
<td>NNeTS</td>
<td>98%</td>
</tr>
<tr>
<td>Connect NW</td>
<td>55%</td>
</tr>
<tr>
<td>Embrace</td>
<td>75%</td>
</tr>
<tr>
<td>CenTre</td>
<td>98%</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>26%</td>
</tr>
<tr>
<td>ANTS</td>
<td>96%</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>81%</td>
</tr>
<tr>
<td>CHANTS</td>
<td>97%</td>
</tr>
<tr>
<td>SONeT</td>
<td>96%</td>
</tr>
<tr>
<td>NEST</td>
<td>100%</td>
</tr>
<tr>
<td>London NTS</td>
<td>85%</td>
</tr>
<tr>
<td>KSS</td>
<td>77%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>98%</td>
</tr>
</tbody>
</table>
Trends in percentages of ventilated babies with a pCO$_2$ recorded on completion of the transfer by team, Jan-Jun 2014-2019 adj’, 2019/20
Numbers of ventilated patients with a pCO2 < 4 kPa by team
Apr 2019 to Mar 2020
pCO2 <4 on completion of transfer as a percentage of ventilated transfers by team, 2019/20

<table>
<thead>
<tr>
<th>Team</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ScotSTAR</td>
<td>6.7%</td>
</tr>
<tr>
<td>NISTAR</td>
<td>6.3%</td>
</tr>
<tr>
<td>NNeTS</td>
<td>3.9%</td>
</tr>
<tr>
<td>Connect NW</td>
<td>6.4%</td>
</tr>
<tr>
<td>Embrace</td>
<td>4.3%</td>
</tr>
<tr>
<td>CenTre</td>
<td>14.7%</td>
</tr>
<tr>
<td>KIDS NTS</td>
<td>5.0%</td>
</tr>
<tr>
<td>ANTS</td>
<td>5.6%</td>
</tr>
<tr>
<td>N Wales NTS</td>
<td>6.3%</td>
</tr>
<tr>
<td>CHANTS</td>
<td>6.3%</td>
</tr>
<tr>
<td>SONeT</td>
<td>7.2%</td>
</tr>
<tr>
<td>NEST</td>
<td>10.0%</td>
</tr>
<tr>
<td>London NTS</td>
<td>8.1%</td>
</tr>
<tr>
<td>KSS</td>
<td>10.0%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>8.1%</td>
</tr>
</tbody>
</table>
Numbers of ventilated babies with a pCO2 <4 kPa by team 2014-2020
Trends in infants with pCO2 <4kPa on completion of transfer, as a percentage of ventilated transfers, by team 2014-20

ScotSTAR  NISTAR  NNeTS  Connect NW  Embrance  CenTre  KIDS NTS  ANTS  N Wales NTS  CHANTS  SONeT  NEST  London NTS  KSS  Peninsula

Numbers of babies with a $pCO_2 > 7$ kPa and $pH < 7.2$ on completion of transfer by team 2019/20
Babies with a pCO$_2$ >7 kPa and pH <7.2 on completion of transfer as a percentage of ventilated transfers by team 2019/20
Trends in proportion of babies with a pCO$_2$ >7 kPa and pH <7.2 on completion of transfer as a percentage of ventilated transfers by team 2014-2020
Service Characteristics 2019/20
24 hour service

2018  2019  2019/20
Yes  No  Yes  No  Yes  No

0  3  6  9  12  15

Yes  No
Service Characteristics 2019/20

Run a cot bureau

<table>
<thead>
<tr>
<th>Year</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019/20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Service Characteristics 2019/20
Conference calling

Yes | No
---|---
2018 | 12
2019 | 13
2019/20 | Yes

SCOTSTAR
Critical care, anywhere
Service Characteristic- infants referred with bile-stained vomiting/aspirates treated as time-critical transfers?

<table>
<thead>
<tr>
<th>Year</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019/20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Do you offer support for locating appropriate maternal and neonatal beds for in-utero transfers?
High Frequency Oscillatory ventilation available in transit 2019/20

- 2018: Yes 9, No 6
- 2019: Yes 6, No 9
- 2019/20: Yes 12, No 3

Yes 39, No 21
Provide servo-controlled active cooling in transit 2019/20

2018: Yes
2019: Yes
2019/20: Yes
Local network “wrong place” review 2019/20
Dedicated vehicles, 2018-2019/20
Consultant service provision 2018-2019/20

- a. Scheduled, all of the time
- b. Scheduled, some of the time
- c. Maybe available, ad-hoc

- 2018
- 2019
- 2019/20
Conclusions/trends 2019/20

- The change to a 12 month reporting period was achieved without significant issues
- Number of transport services across the UK has stabilised after a period of consistent consolidation
- Although the numbers of transfers is falling from a peak in 2015, the proportion of live births being transferred is increasing
- Proportions ventilated, on CPAP and High Flow stabilising
- Numbers and proportions of time critical numbers continue to fall - time to look at the definitions again?
- Questions remain around the value of recording response and stabilisation times - what do they tell us? Further discussion around this area is required for the next data collection period.
- Hypothermia on completion of transfer remains a stubborn problem through previous years data has shown the the incidence of hypothermia is higher before transfer and most infants’ temperatures improve during the transfer process
- Wide variation in rates of parents travelling with their babies remain, though significant improvements have been seen in some teams.
Thanks

• All the service leads and data crunchers
• Colin Devon