Neonatal Transport Group. Brighton 2015.

Andy Leslie

Chair of NTG.

University Hospitals Coventry and Warwickshire NHS Trust

University Hospitals of Leicester NHS Trust

Caring at its best

Nottingham University Hospitals NHS Trust

Good news.

Although work has gone up….

- Dedicated vehicles & crews more widely available.
- More Consultants scheduled for transport.
- Time critical - 81% mobile in 60 mins
- 97% of transfers are done by the commissioned team.
- Active cooling now almost completely available.
- More services can conference calls.

NTG Report.

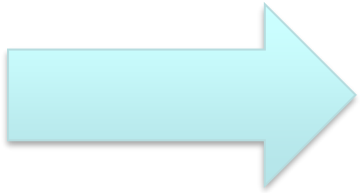
- Incident shared-learning system
- Air transport
- European neonatal transport group
- Bile-stained vomiting transfers
- Reorganisations
- Data systems
- CEN

Do you have a service policy to treat as time-critical transfers infants referred with bile-stained vomiting/aspirates?

- Yes: 9
- No: 10

Reorganisations

- NETS Solent
- Thames Valley



SONeT

Data systems

- Dataset substantially unchanged
- Badger transport module reviewed and relaunched by NTG/Badger joint group.

European (CEN) Standard for neonatal transport incubator equipment

- Revision of EN 13976-2 (incubator systems).
- Meeting in France in June 2015

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4.8 Mass

The mass of the transport incubator system including its rail parts shall not exceed 140 kg.

European (CEN) Standard for neonatal transport incubator equipment

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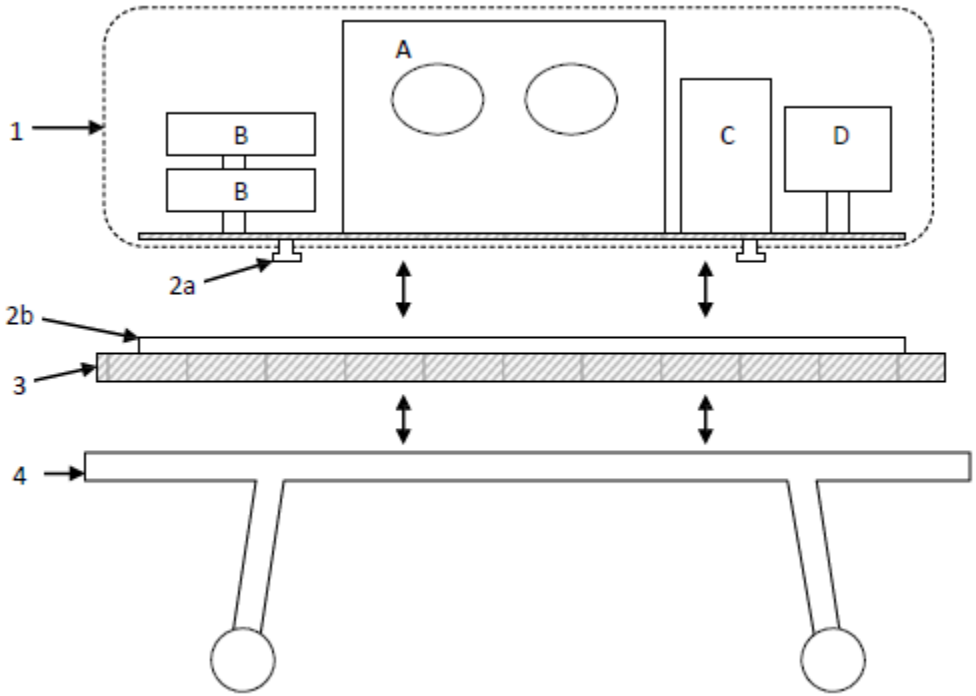

European (CEN) Standard for neonatal transport incubator equipment

- Revision of EN 13976-2 (incubator systems).

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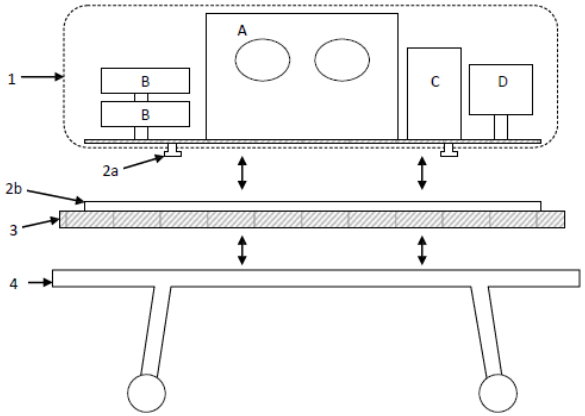
NOTE 1 The 140 kg restriction applies to the section marked 1 – Incubator System in Figure 1 in EN 13976-1(date) and where this section may be separated from the trolley and interface during clinical use. This weight limit does not apply for cases where the undercarriage is an integral part of the TIS.



Data 2014

Method

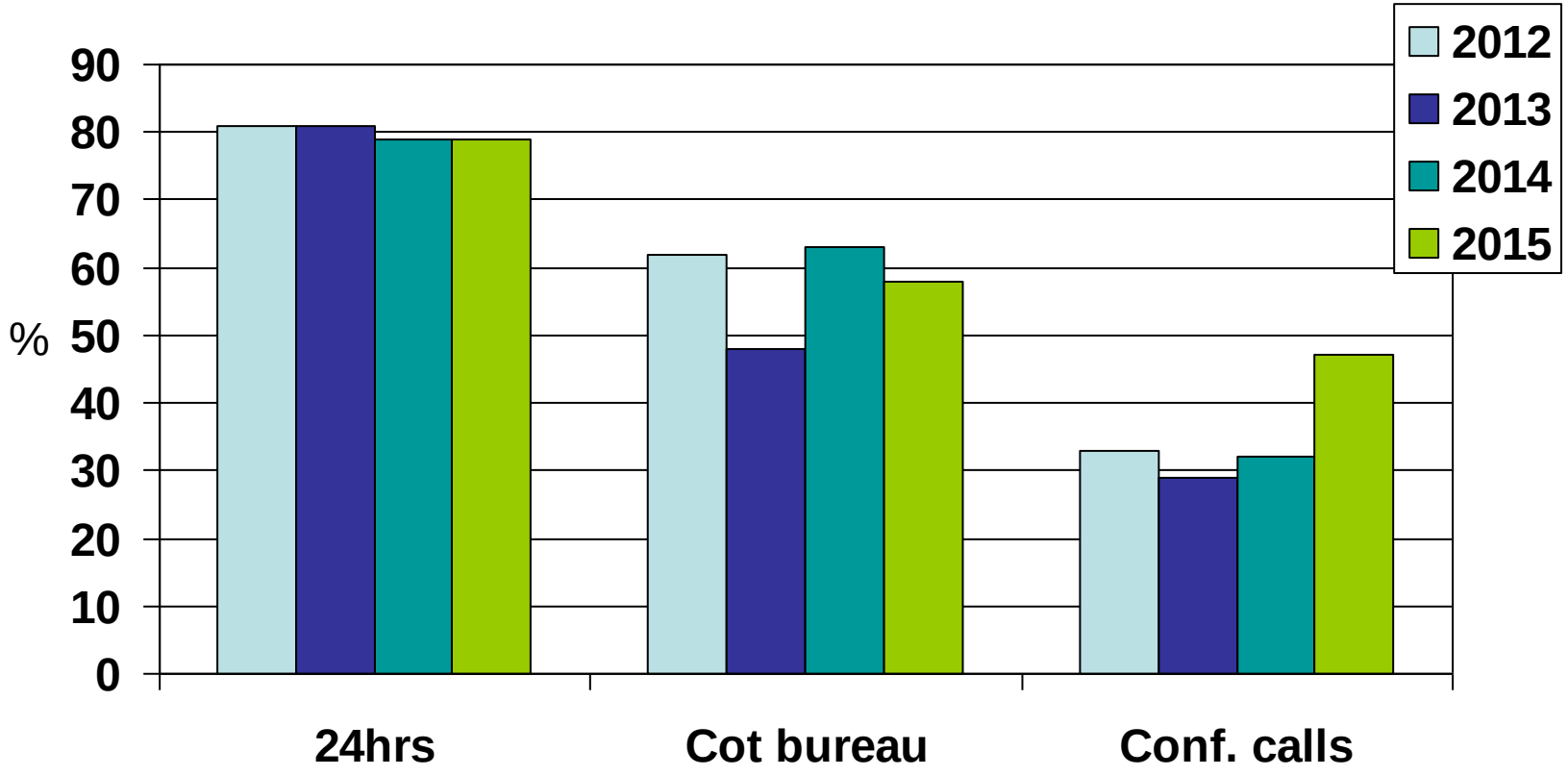
- Email to transport service's medical and nursing leads requesting activity data from 1.1.15 to 30.6.15
- Brief additional information about each service.

Number of services

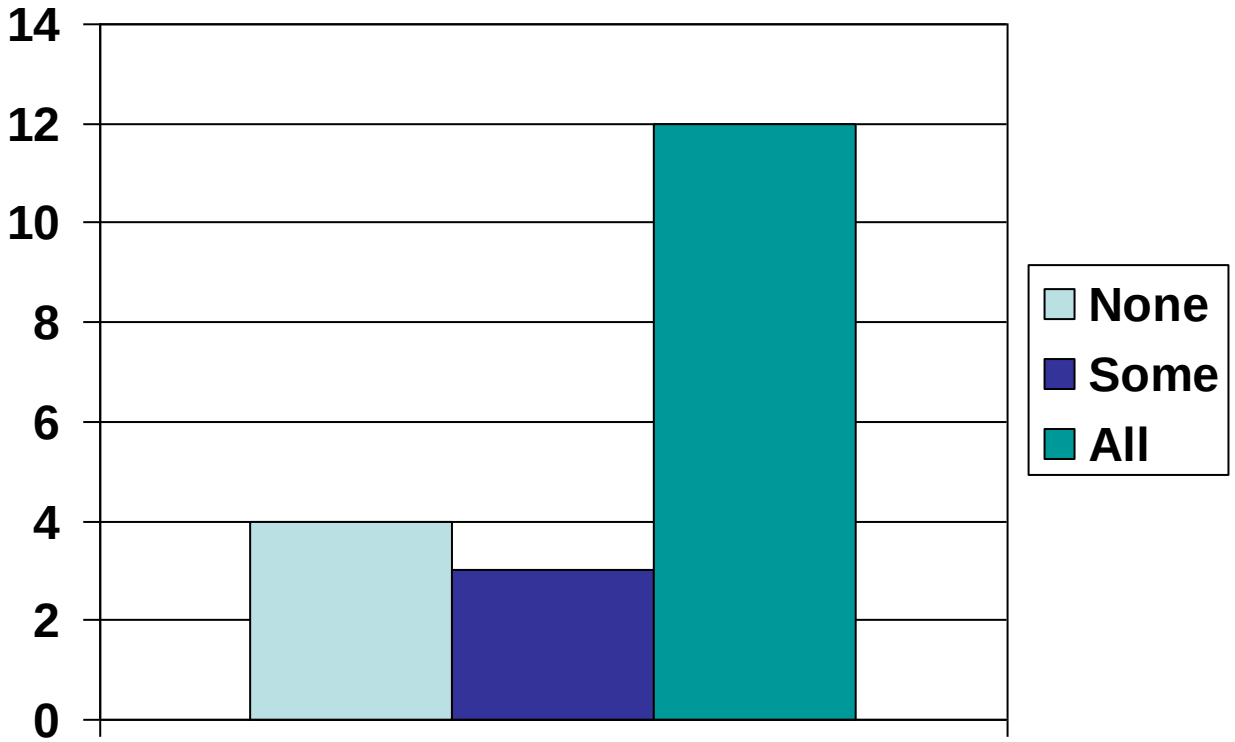
- 2012 – data from 22
- 2013 – data from 21
- 2014 – data from 19
- 2015 – data from 19

  – Number of services will change again next year.

Service Characteristics



Dedicated vehicles & crews, 2015.



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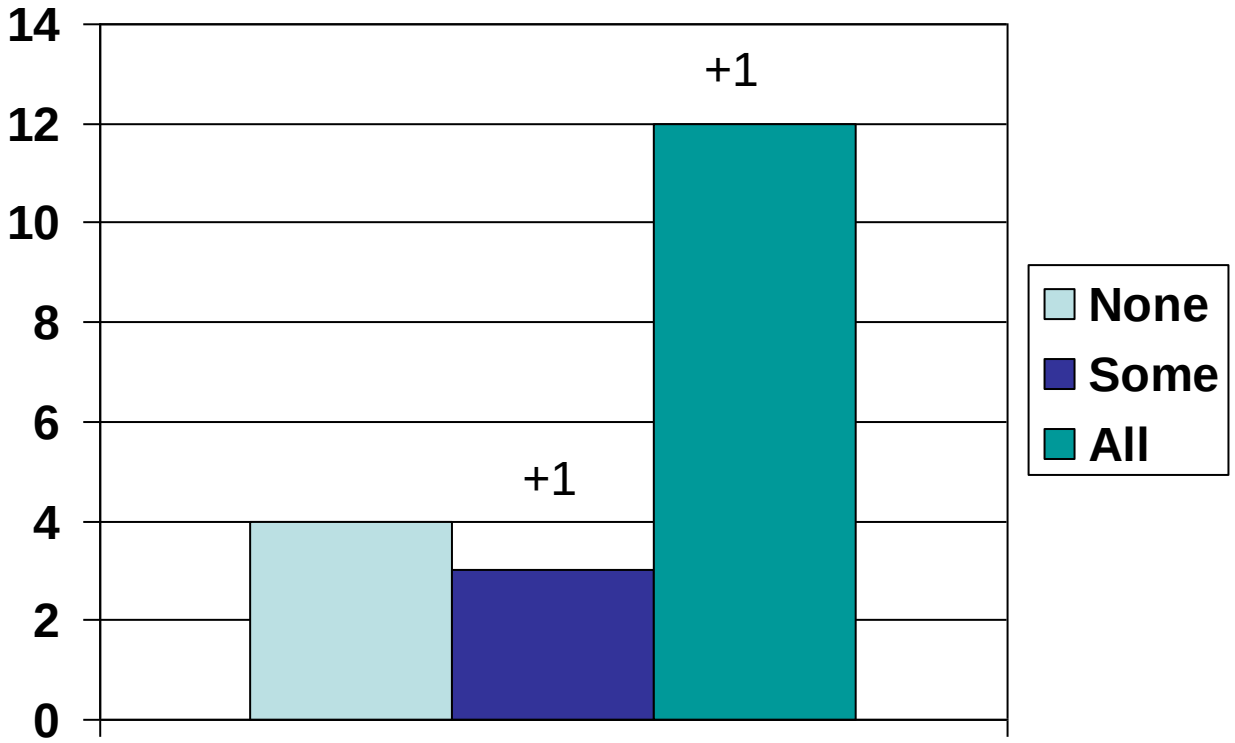
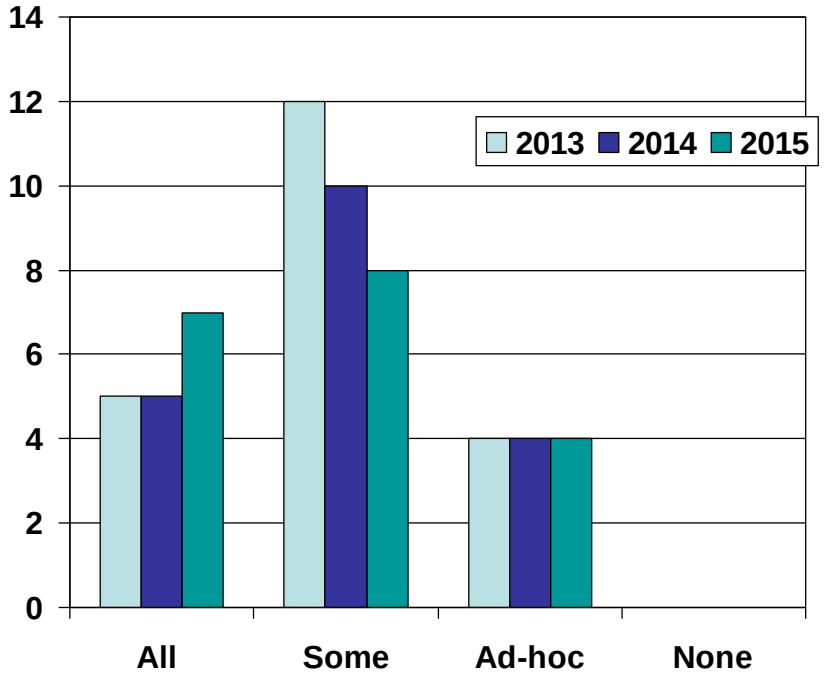
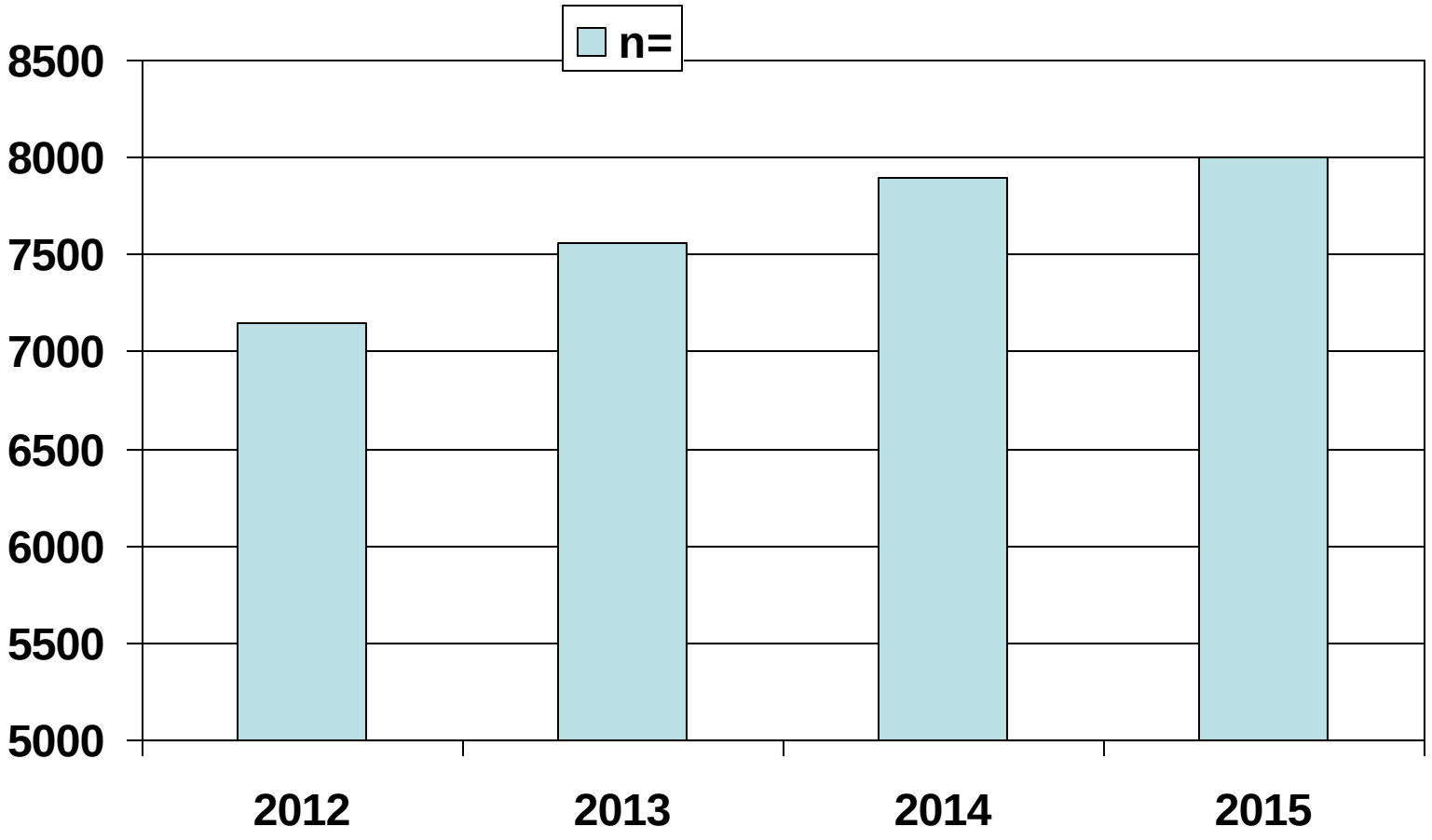


Consultants

- Consultant availability **to attend transfers:**
  - Scheduled, all of the time.
  - Scheduled, some of the time
  - Maybe available, ad-hoc.
  - Never available to attend.



UK summary data, Jan-Jun/year



UK summary data
Jan-Jun/year

	2012	2013	2014	2015
Total transfers	**7152**	**7562**	**7892**	**7997**
Ventilated	1889 (26%)	1961 (26%)	1949 (25%)	2155 (27%)
HFOV				
CPAP/ high-flow				
Cooling				
iNO				
Palliative				

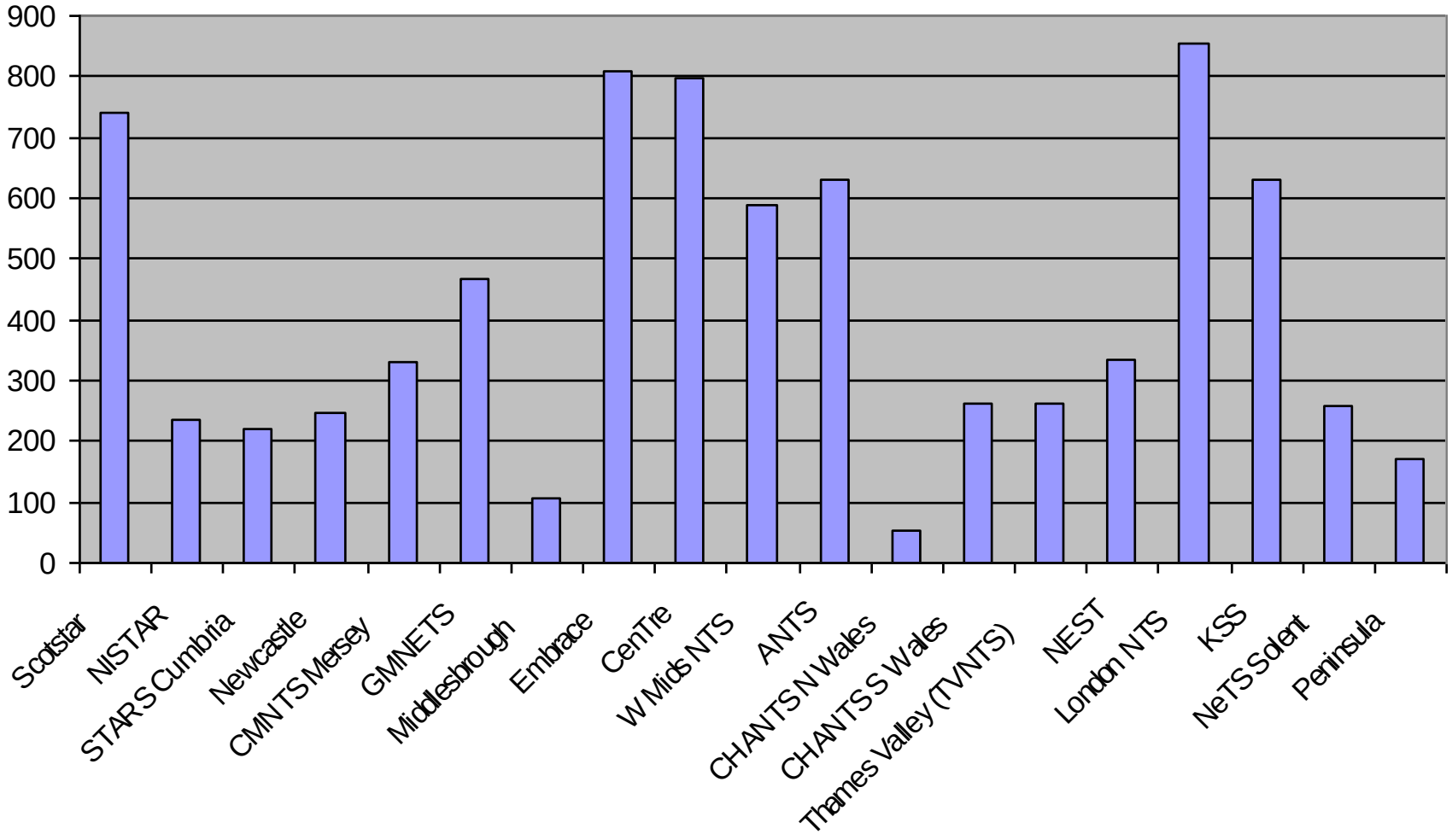
UK summary data Jan-Jun/year

	2012	2013	2014	2015
Total transfers	**7152**	**7562**	**7892**	**7997**
Ventilated	1889 (26%)	1961 (26%)	1949 (25%)	2155 (27%)
HFOV	-	-	-	16* (<1%)
CPAP/ high-flow	847 (12%)	906 (12%)	819 (10%)	790 (10%) 452 (6%)
Cooling	247 (3%)	288 (4%)	249 (3%)	274 (3%)
iNO	99 (1%)	111 (1%)	117 (1%)	138 (2%)
Palliative	22 (<1%)		19 (<1%)	19

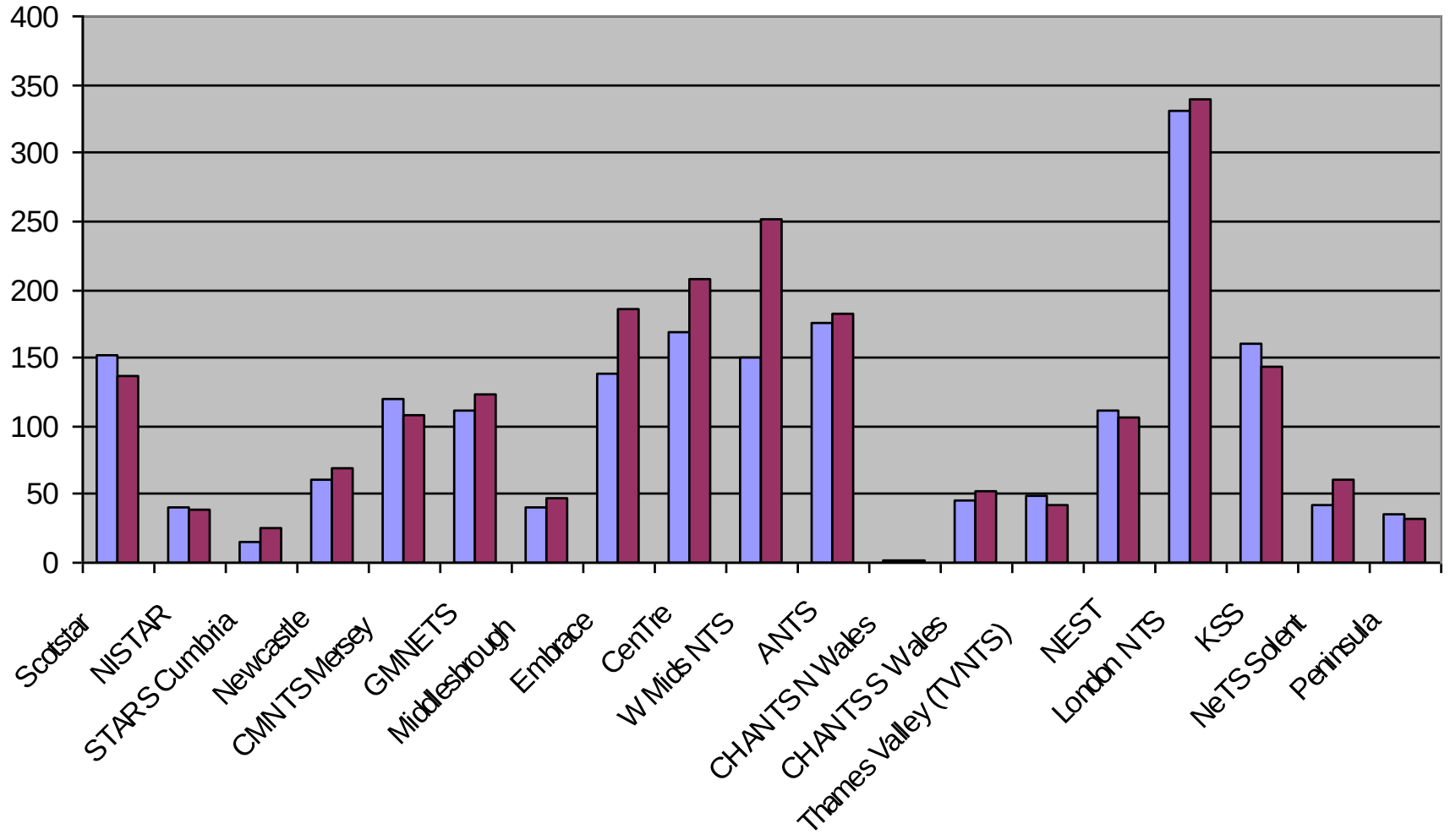
UK summary data
Jan-Jun 2012-15, %change

	2012	2015	% change
Total transfers	**7152**	**7997**	**+12%**
Ventilated	1889 (26%)	2155 (27%)	+14%
Cooling	247 (3%)	274 (3%)	+11%
iNO	99 (1%)	138 (2%)	+39%

Total Transfers/team, Jan – June 2015



Number of ventilated transfers, Jan-Jun 2014 & 2015.



Response standards

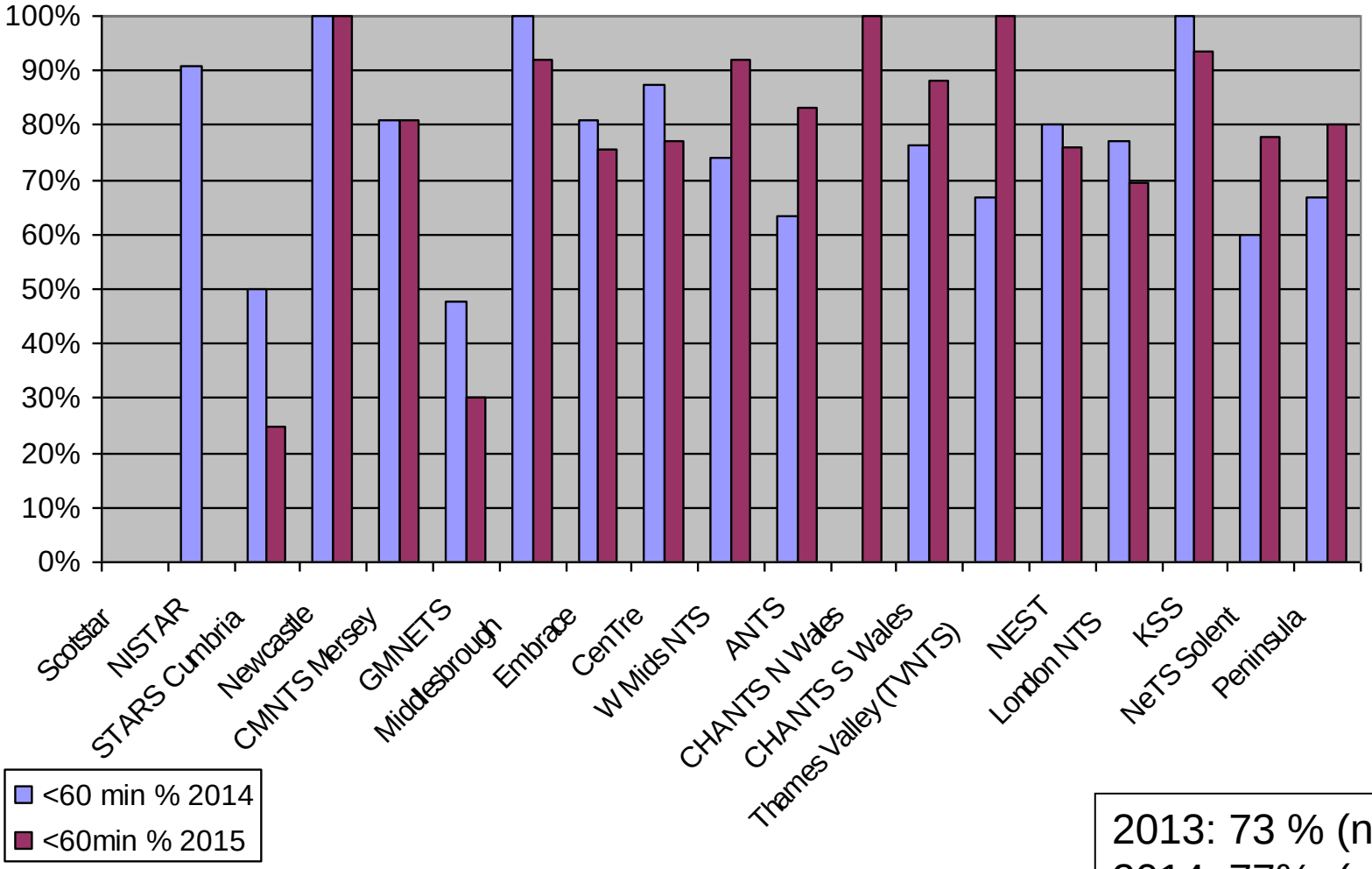
Data on

- Time critical (% mobile/60 mins)
- Referral response time (for ICU/uplift)
- Uplift transfers performed (%)

% of time critical transfers team mobile within 60 minutes of start of referring call.

2013: 73 % (n=404)
2014: 77% (n=409)
2015: 81% (n=469)

% of time critical transfers team mobile within 60 minutes of start of referring call.



2013: 73 % (n=404)
2014: 77% (n=409)
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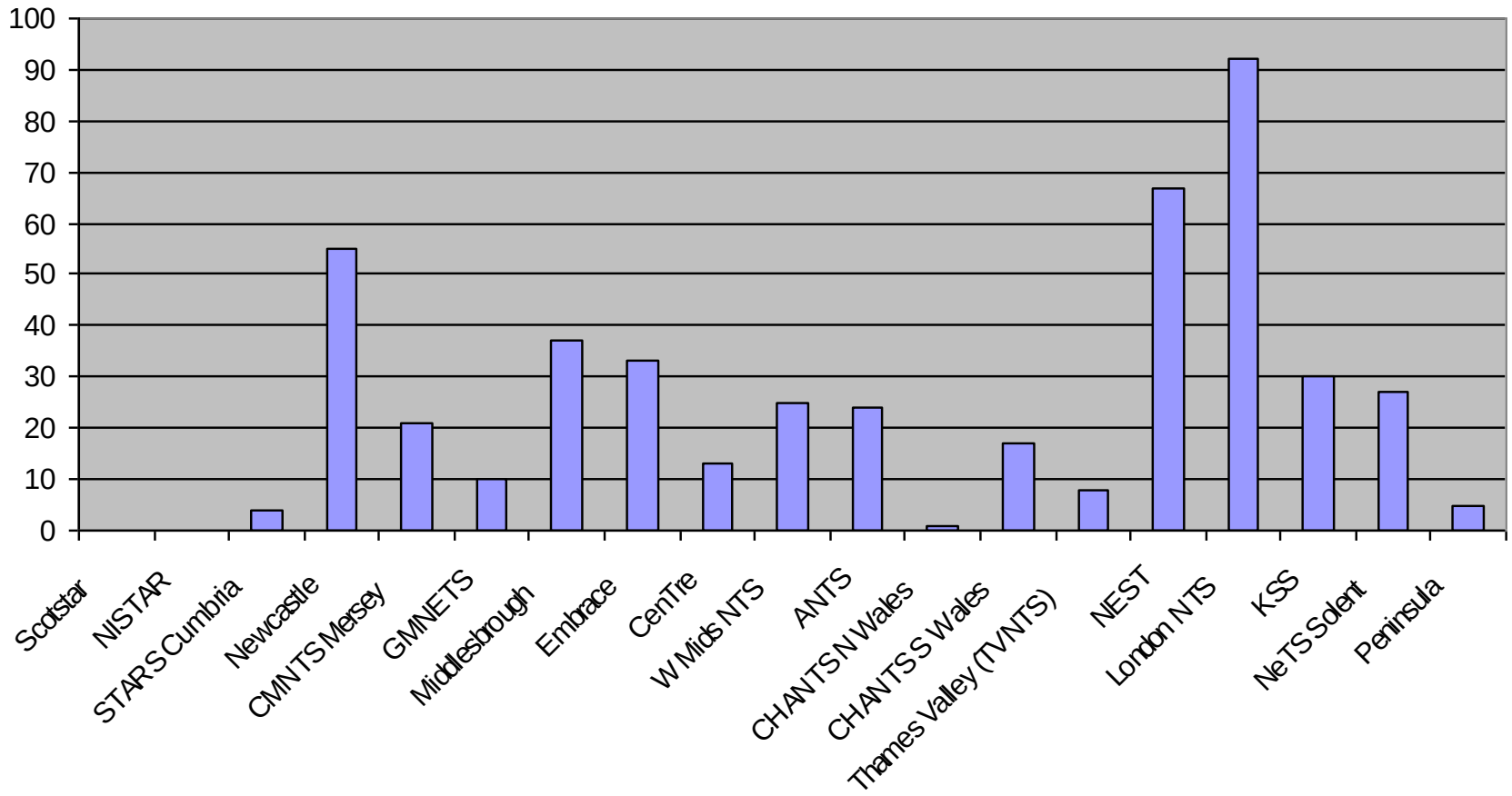
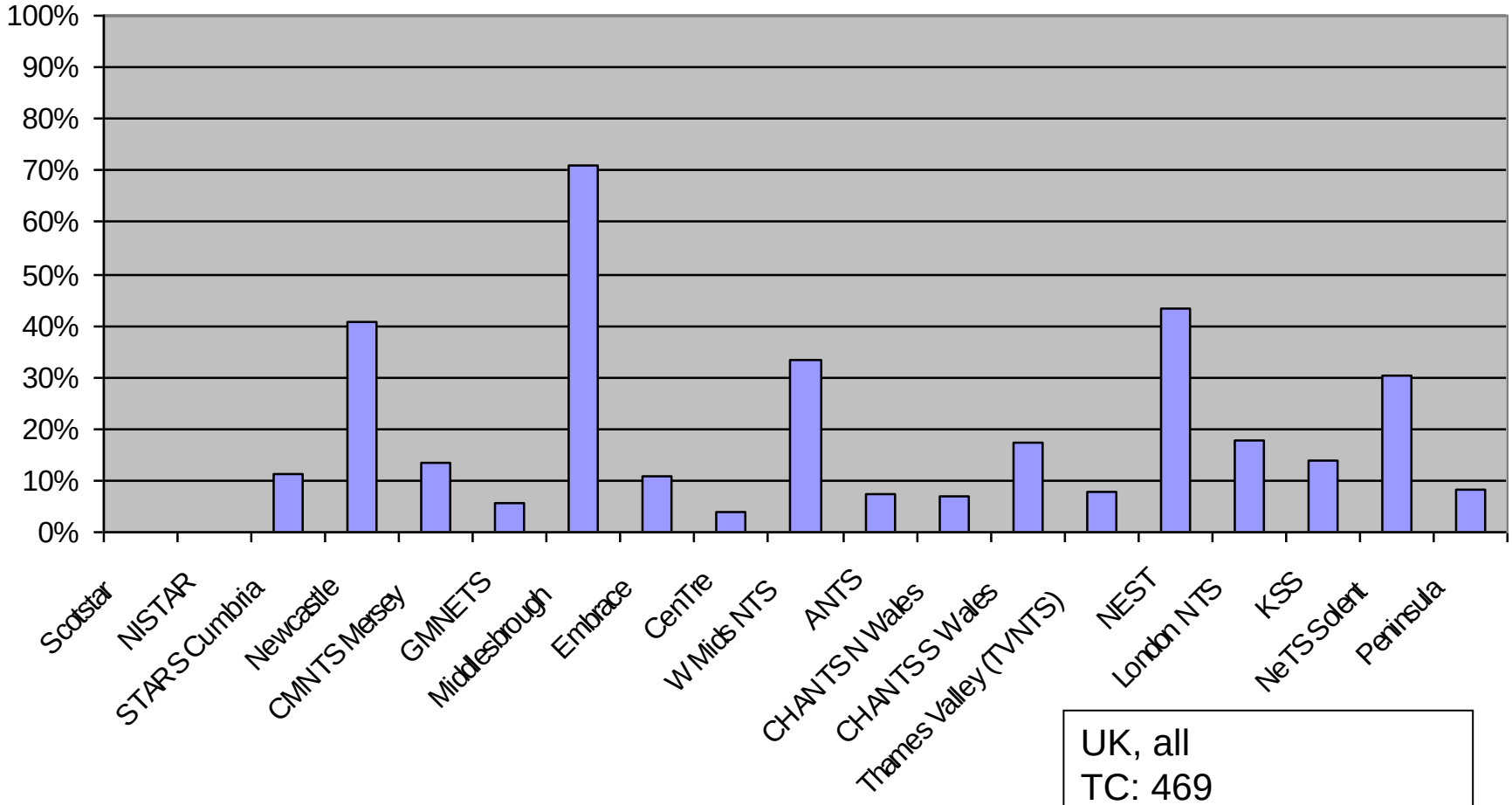
Number of time-critical transfers/team, Jan-Jun 2015



TC transfers/team as % of uplift transfers, Jan-Jun 2015



UK, all
TC: 469
Uplift: 3172
(15%)

Team arrived with the patient within 3.5 hours of the start of the referring call (Intensive care; uplift) (%), Jan-Jun/year.

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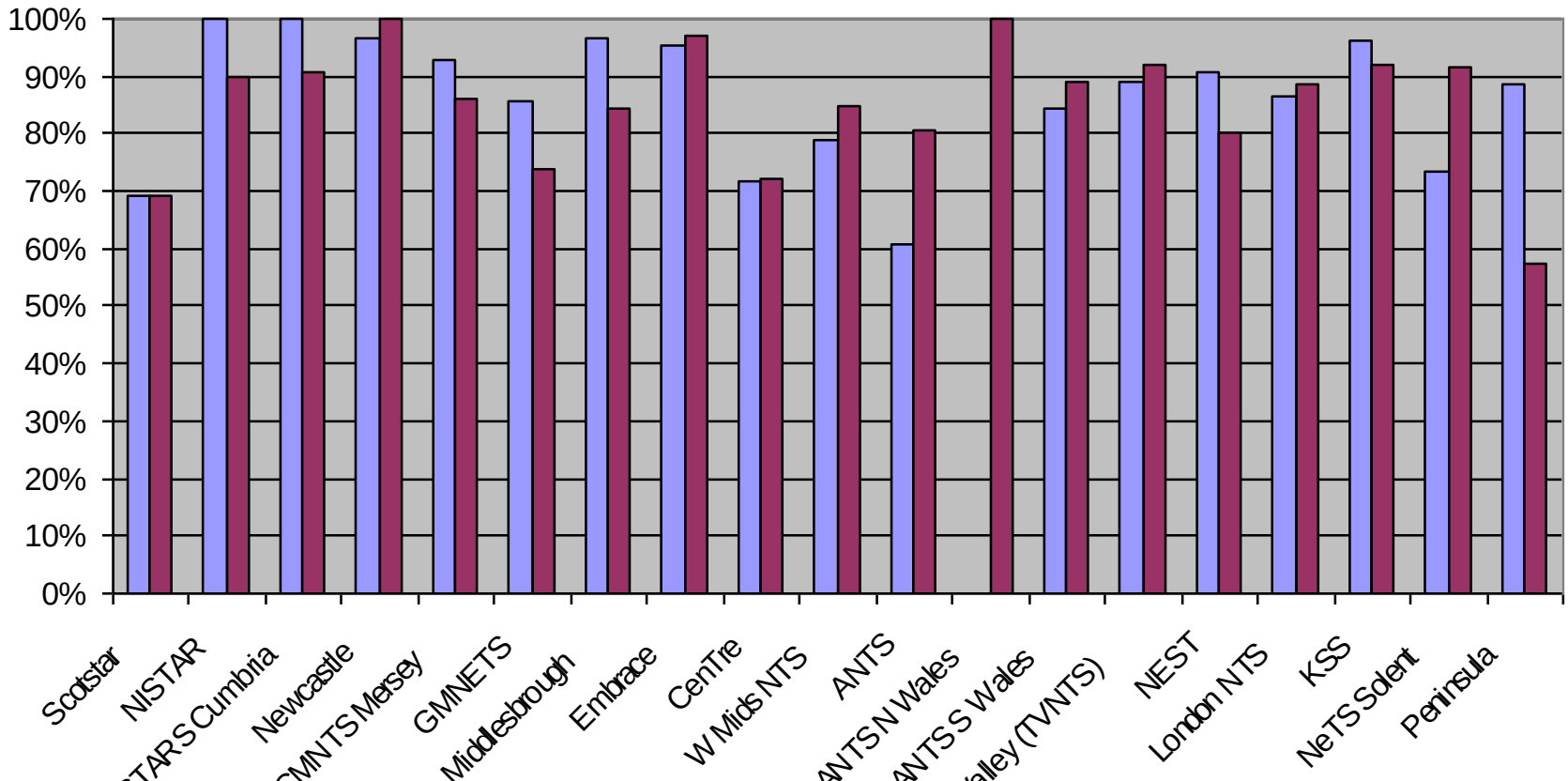

2013: 72% (n=1689)
2014: 86% (n=1836)
2015: 83% (n=1945)

Neonatal Transport Services transfer at least 95% of patients requiring transfer for uplift within its defined catchment area. (%)

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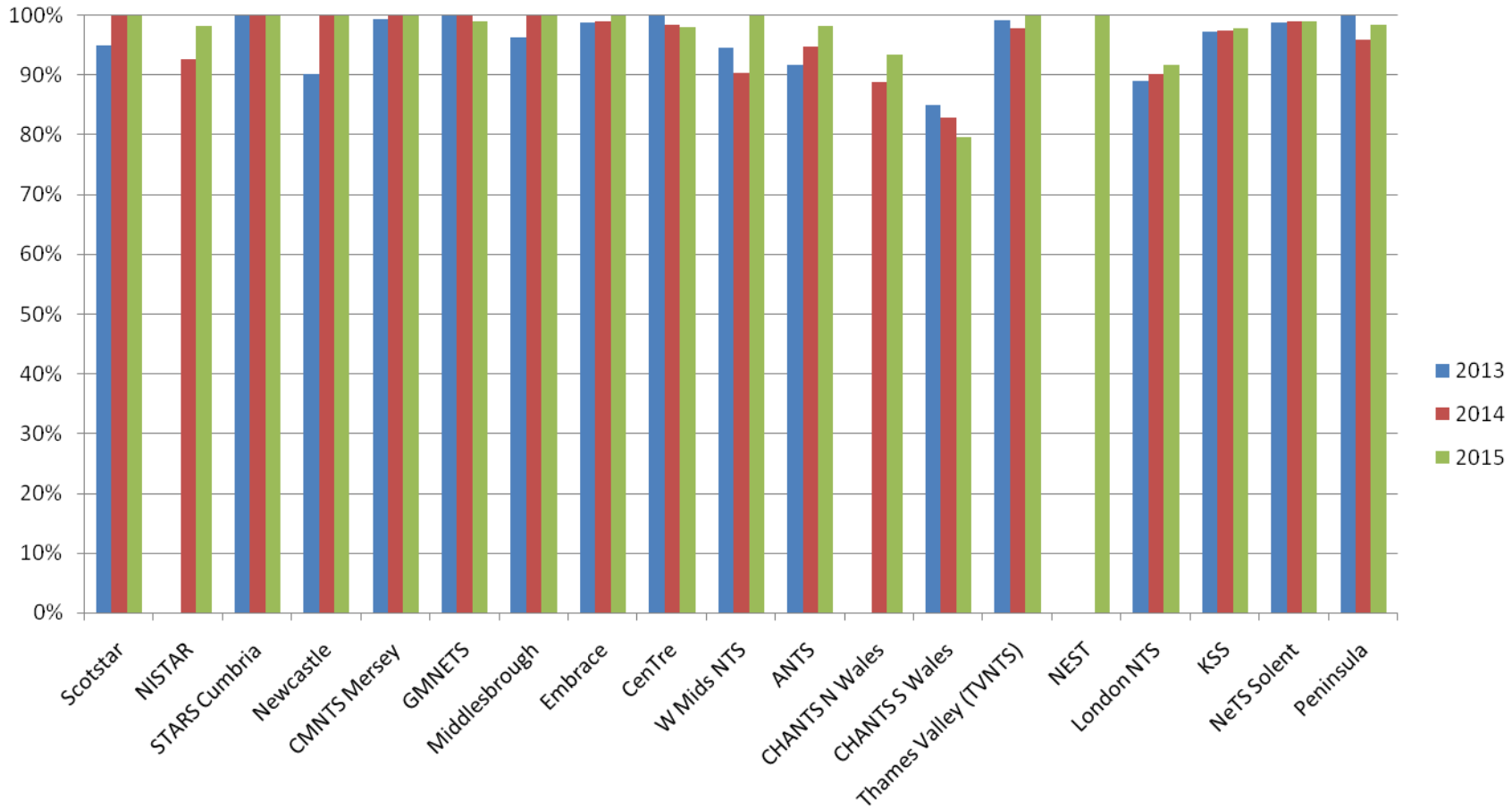

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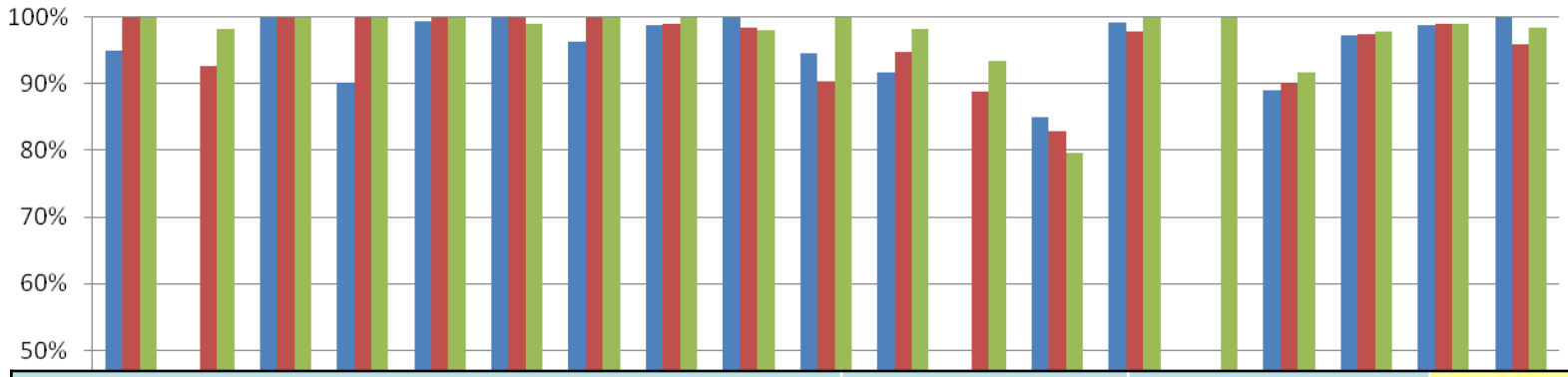


	2013	2014	2015
n=	3109	3416	**3268**
Done by commissioned team n= (%)	2704 (87)	3097 (91)	**3172 (97)**

Number transferred on iNO – Jan – June/year

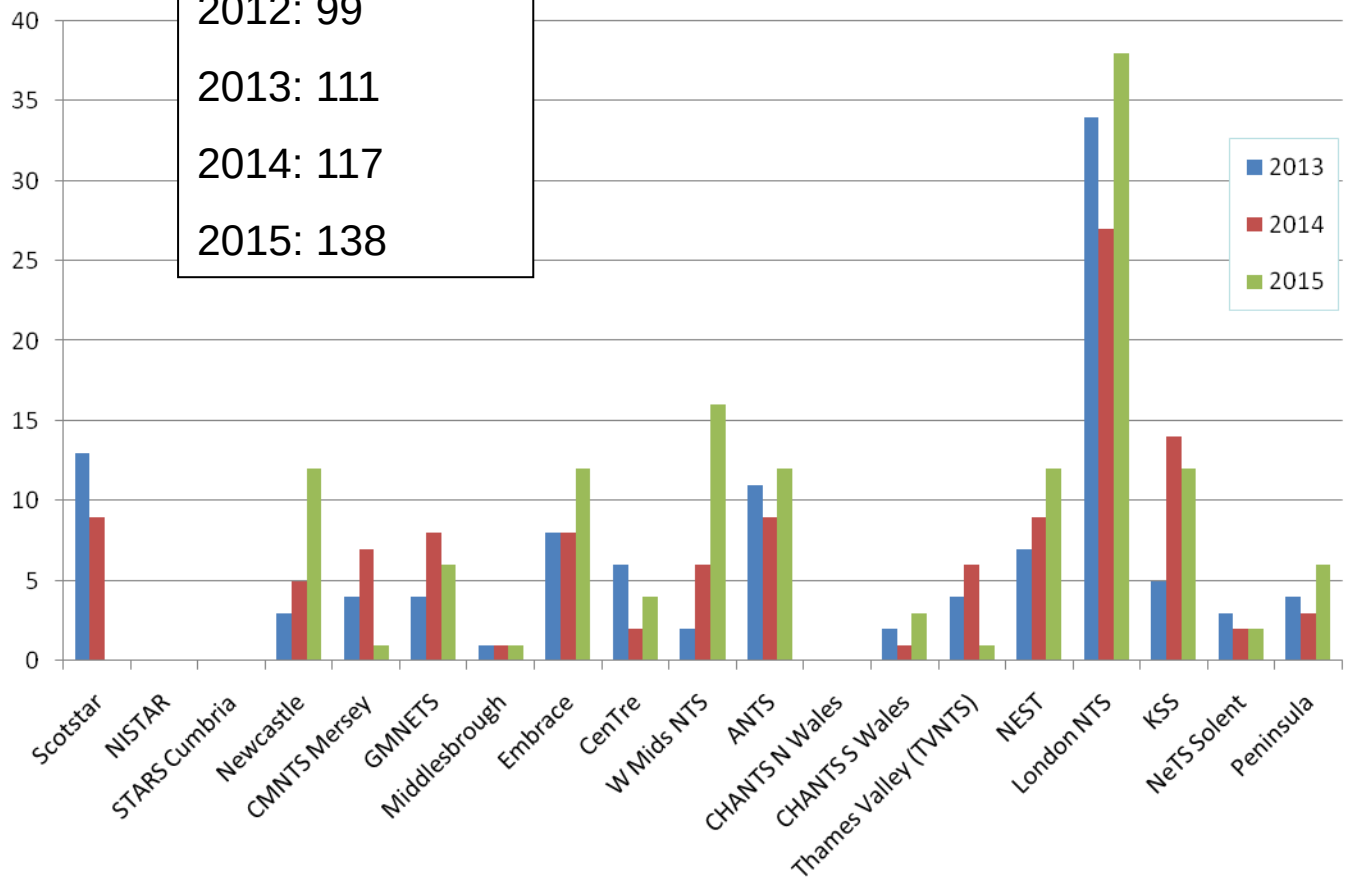
Total for UK

2012: 99

2013: 111

2014: 117

2015: 138



Number transferred for cooling or assessment for cooling, Jan – Jun/year

Total for UK

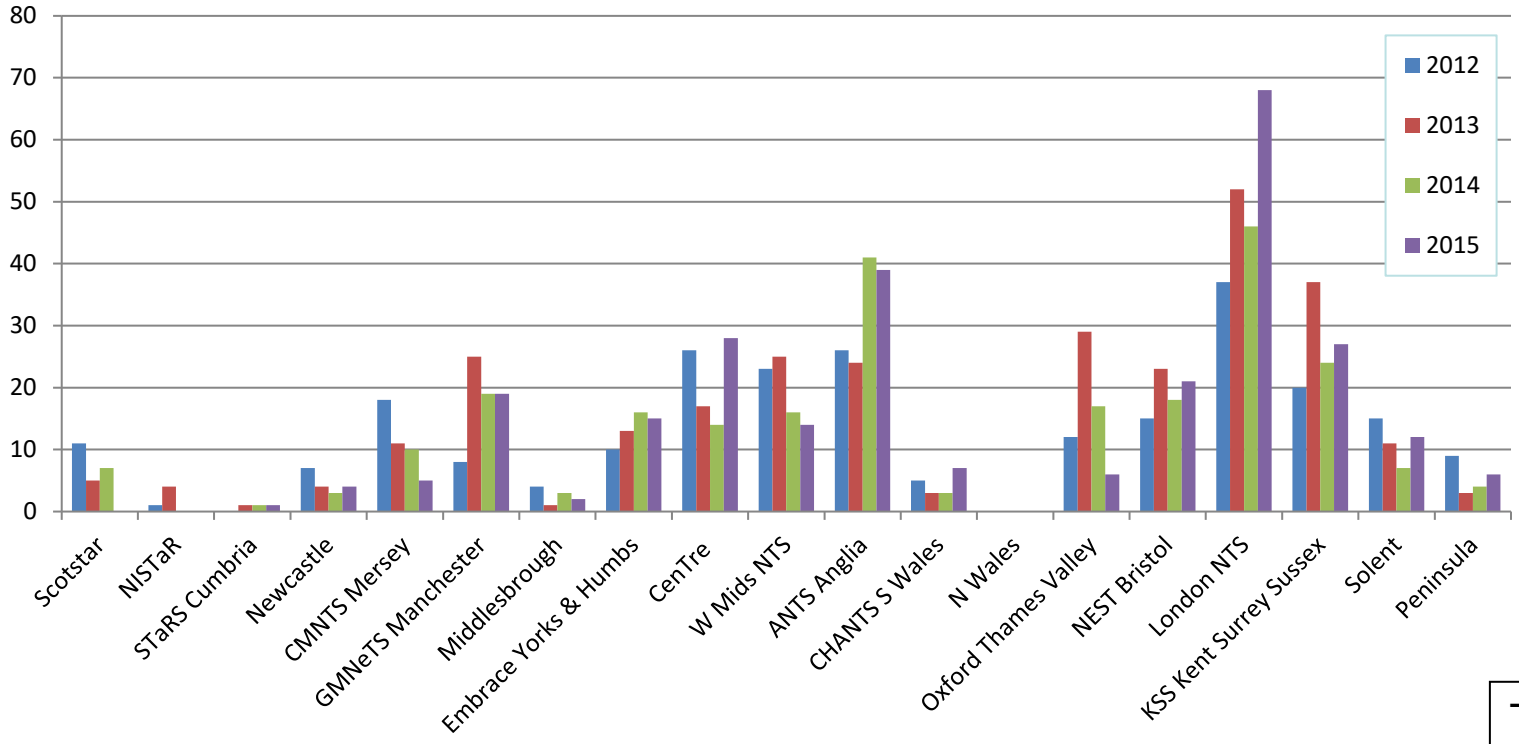
2012: 247

2013: 288

2014: 249

2015: 274

Number transferred for cooling or assessment for cooling, Jan – June 2012, 2013, 2014, 2015



Total for UK

2012: 247

2013: 288

2014: 249

2015: 274

Transferred for cooling, >6h at completion, temp 33-34^{0}C (%)

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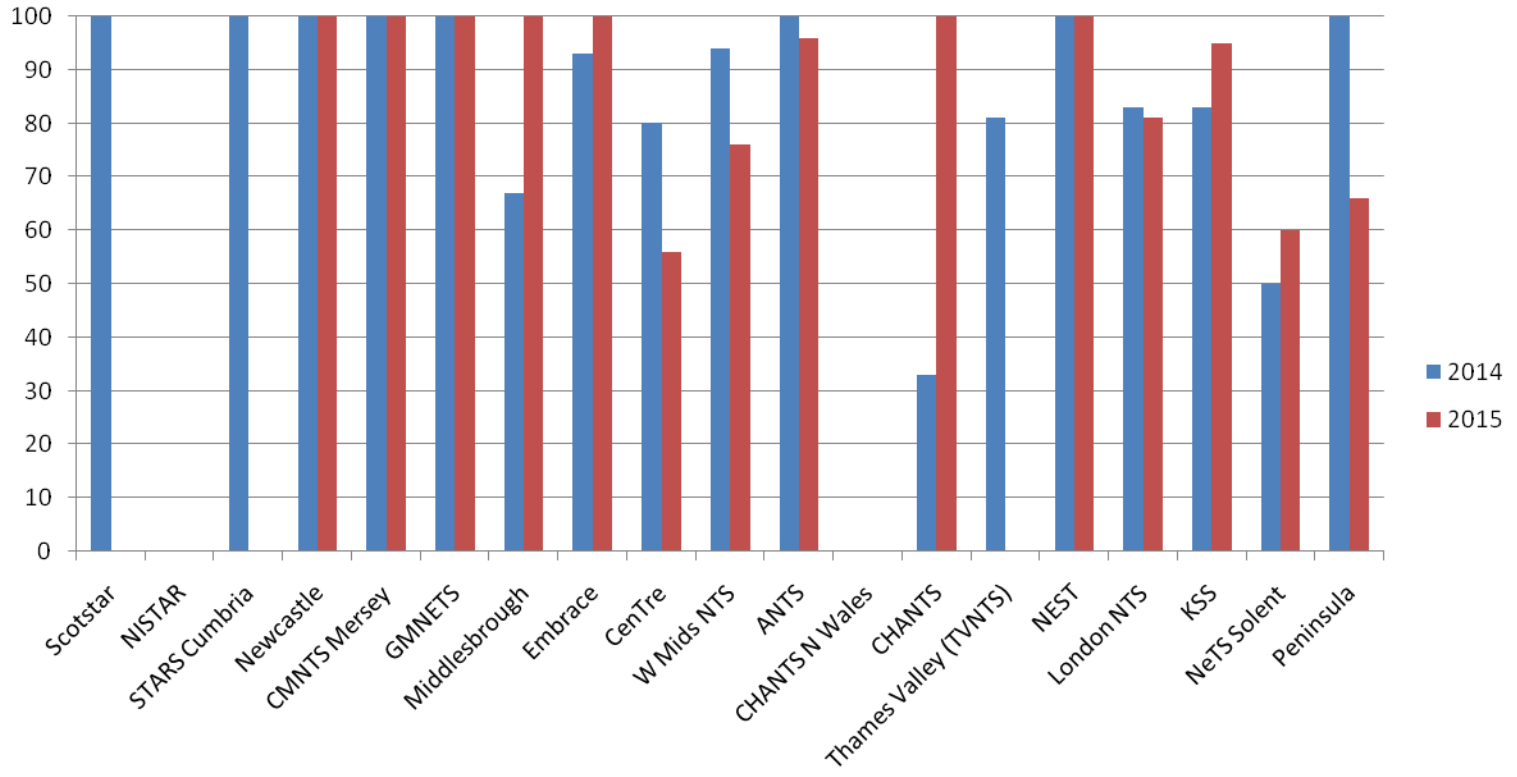
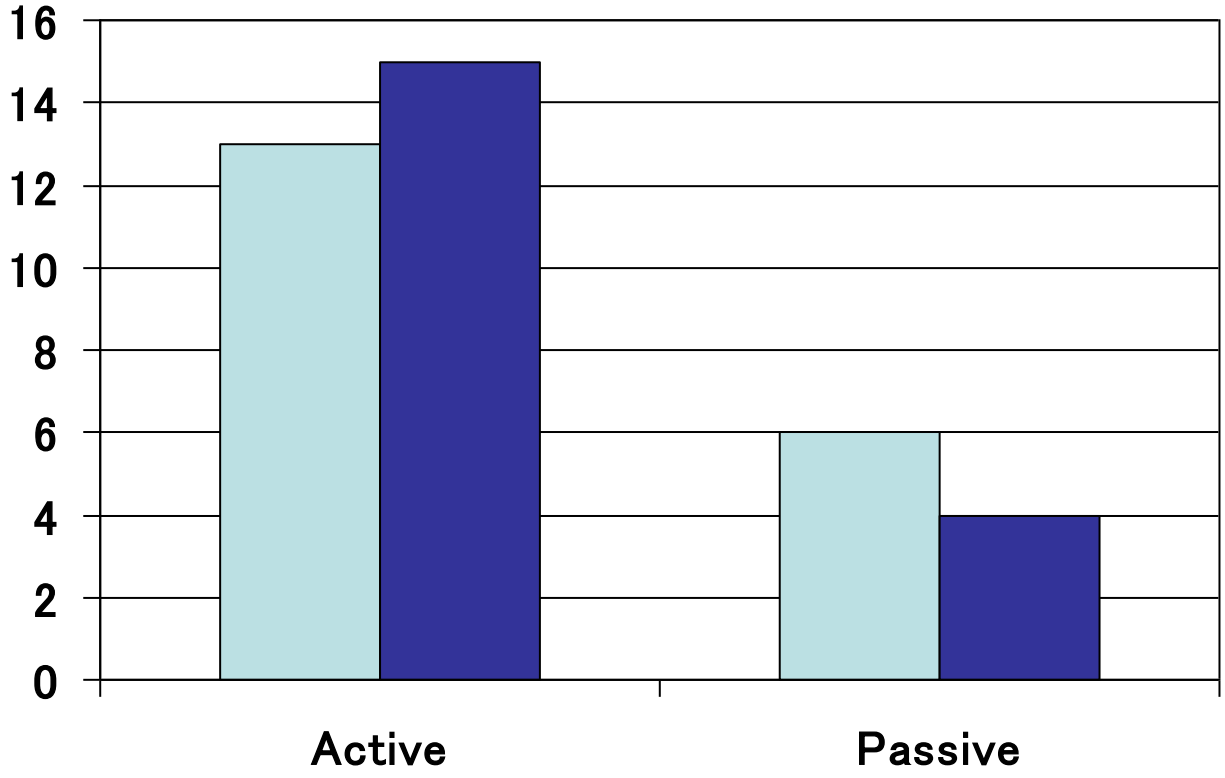


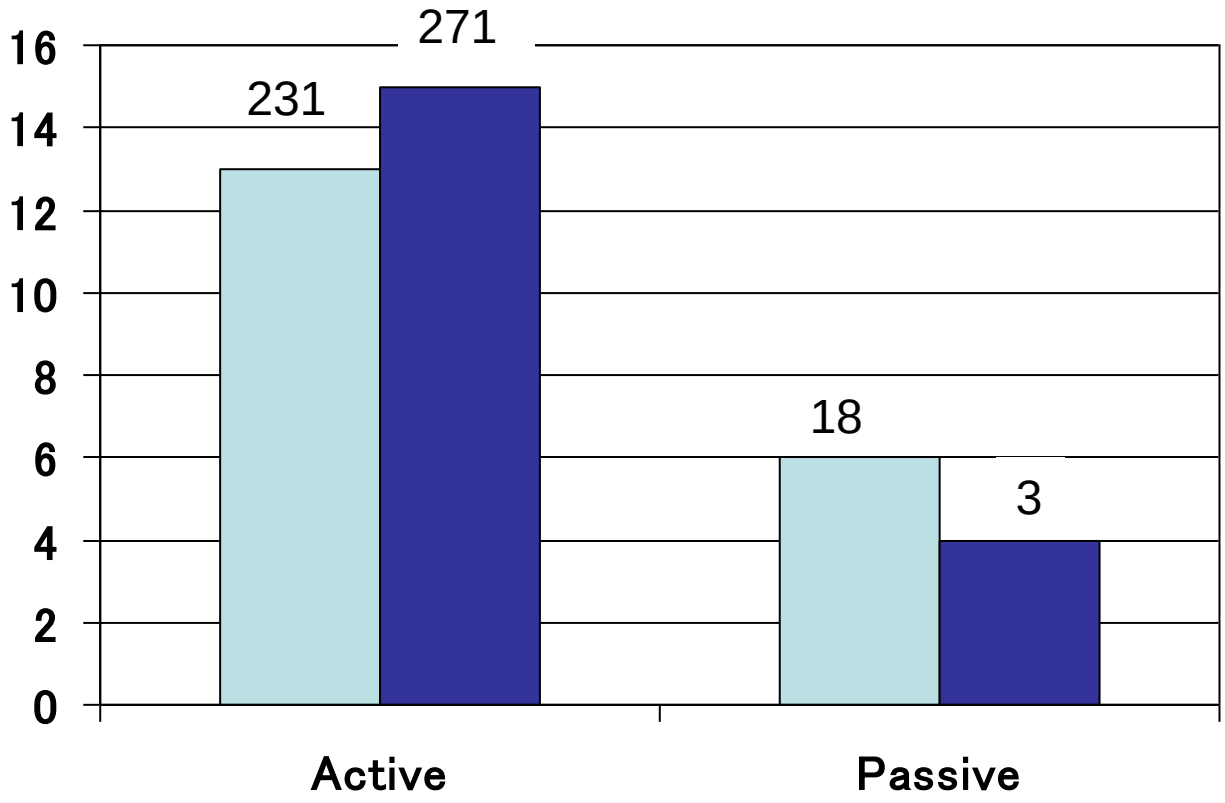
Transferred for cooling, >6h at completion, temp 33-34^{0}C (%)

	2014	**2015**
Cooling n=	249	**274**
Cooling>6h n=	192	**173**
33-34^{0}C n=(%)	172 (90%)	**147 (85%)**

Active vs. passive cooling, number of teams, 2014 & 15.



Active vs. passive cooling, number of teams, 2014 & 15.



Hypocarbia & hypercarbia

- pCO_2 <4 kPa

- pCO_2 >7 kPa and pH<7.2

…on the gas measurement on completion of transfer of uplift and resource transfers.

Hypocarbia & hypercarbia

- Note that not all infants had pCO_2 available post-transfer.

Hypocarbia & hypercarbia

	2013	**2014**	**2015**
Uplift/resource + gas available n=	1355	1895	1685
pCO_2 <4kPa, n=(%)	118 (9)	106 (5)	122 (7)

Hypocarbia & hypercarbia

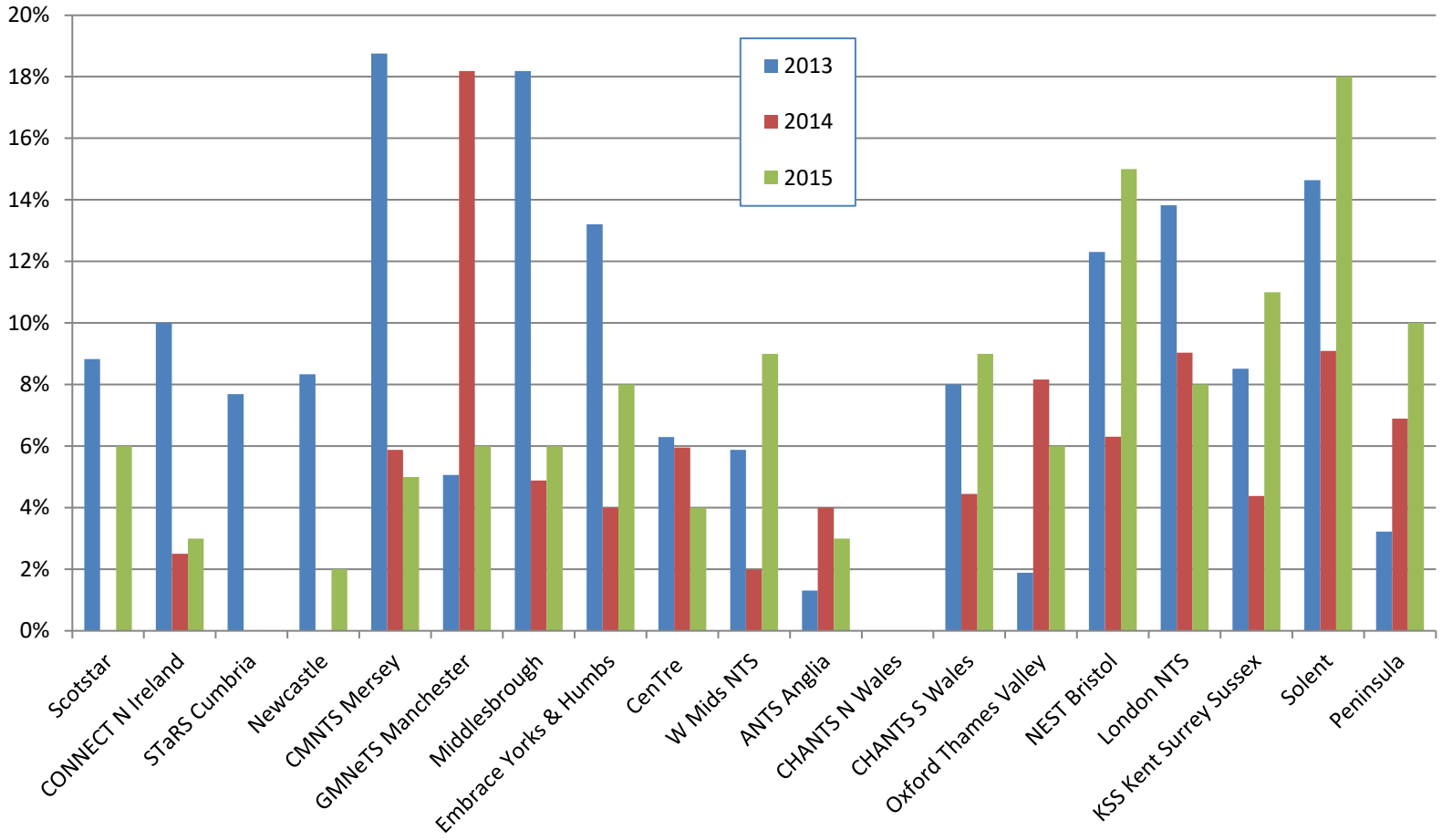
	2013	**2014**	**2015**
Uplift/resource + gas available n=	1355	1895	1685
pCO_2 <4kPa, n=(%)	118 (9)	106 (5)	122 (7)
pCO2>7kPa & pH<7.2, n=(%)		68 (3)	94 (6)

Hypocarbia & hypercarbia

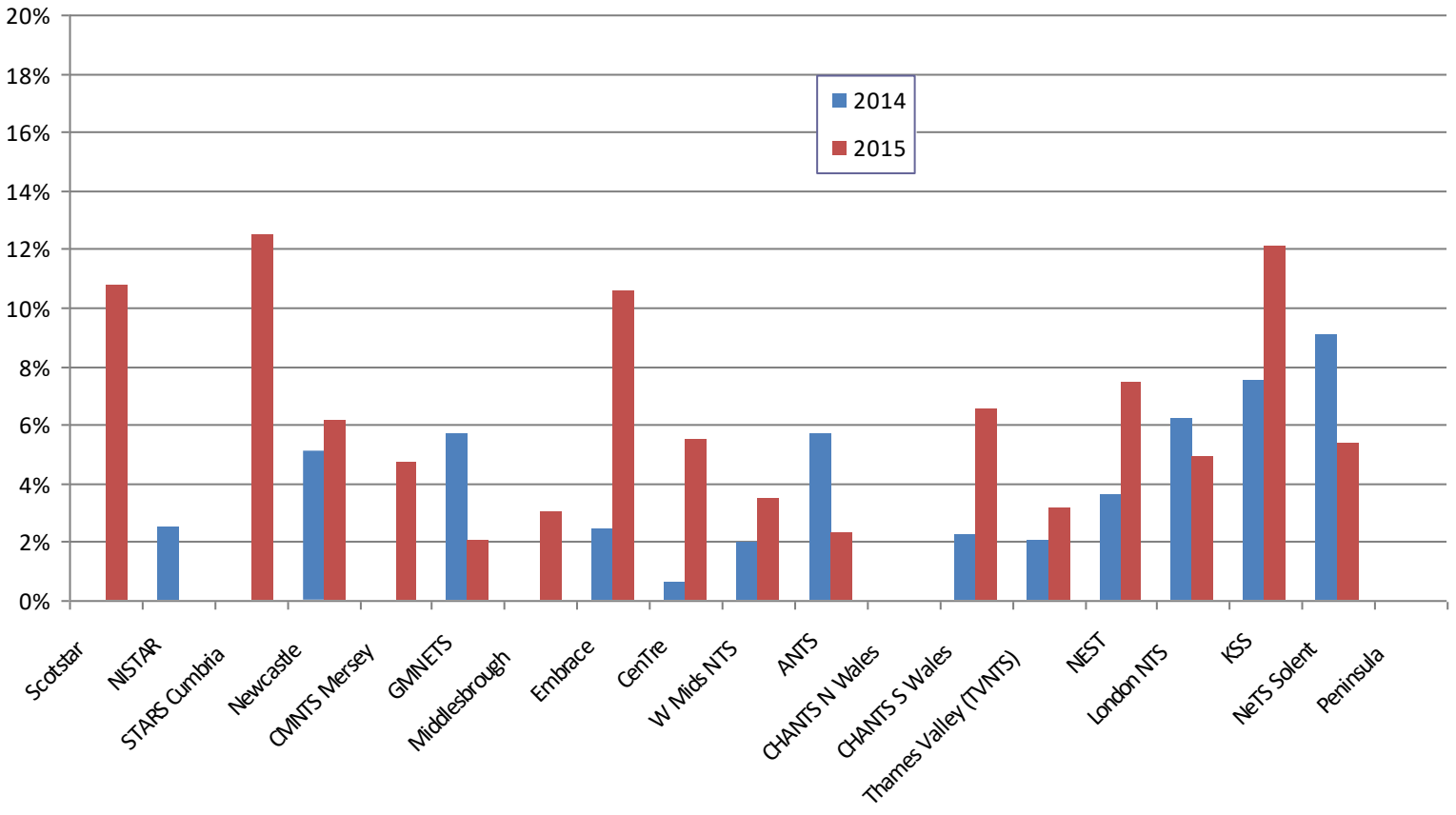
	2013	2014	2015
Uplift/resource + gas available n=	1355	1895	1685
pCO_2 <4kPa, n=(%)	118 (9)	106 (5)	122 (7)
pCO2>7kPa & pH<7.2, n=(%)		68 (3)	94 (6)

Infants transferred for cooling	2014	2015
Cooling, n=	249	274
Cooling & ventilated & gas available n= (%)	202 (81)	230 (84)
pCO_2 <4kPa, n=(%)	27 (13)	25 (11)

% pCO_2 <4 kPa on completion , per service. Jan – June/year



% pCO_2 >7kPa & pH<7.2 on completion , per service, Jan – June/year.



Operational reason for transfer for premature infants transferred on the first 3 days of life.

Operational reason for transfer for premature infants transferred on the first 3 days of life.

Gestation at Birth	Uplift		Capacity		Repatriation		Total	
	2014	2015	2014	2015	2014	2015	2014	2015
23^{+0} to 26^{+6}	208	199	9	11	11	2	228	212
27^{+0} to 31^{+6}	255	328*	97	105	46	49	398	482
Total	463	527	106	116#	57	51	626	694

* = +29%
# = +9%

Change in workload/team 2014 (n=7892) to 2015 (n=7997)

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