



Neonatal Transport Group. Belfast 2014.

Andy Leslie
Chair of NTG.

National summary

- Work has gone up, but not evenly.
- Time critical numbers are static, but 77% mobile in 60 mins (up from 73%).
- More teams are arriving with infant within 3.5hrs for uplift: (72 – 86%).
- 91% of transfers are done by the commissioned team.
- Most cooled infants are transferred with active cooling.
- Overventilation rates improving (9% - 5%)

NTG Report.

- NTG terms of reference.
- Commissioning.
- Data systems.
- CEN is back.....
- Air transport.

Commissioning

- ScotSTAR launched in Scotland
- England – mergers and redesigns
 - Mergers with PIC services
 - Merging NIC services
 - Re-tendering for NIC transport

Dataset/IT platform

- Dataset substantially unchanged
- Working group looking at Badger platform transport module.

CEN/TC 239/WG4 - Transportation of incubators

- Have started revising EN 13976-2 (incubator systems).
- Oct meeting in Lubeck had representation from Norway (3), Sweden (4), France (1), Germany(1), UK (1 from Ferno).
- **“Preparation of the next meeting**

Until next time all experts are to make detailed proposals, taking into account views from different stakeholders within their respective national mirror committees. Proposals and comments will be sent to the secretariat using the file "Template for comments" **no later than January 7th 2015**. The next meeting with WG4 will take place in Uppsala in the beginning of 2015...”

Air transport

Perinatal & Paediatric Air Transport Group.

- Brings together clinicians and providers.
- Aspires to securing a nationally-available system

Data 2014

Method

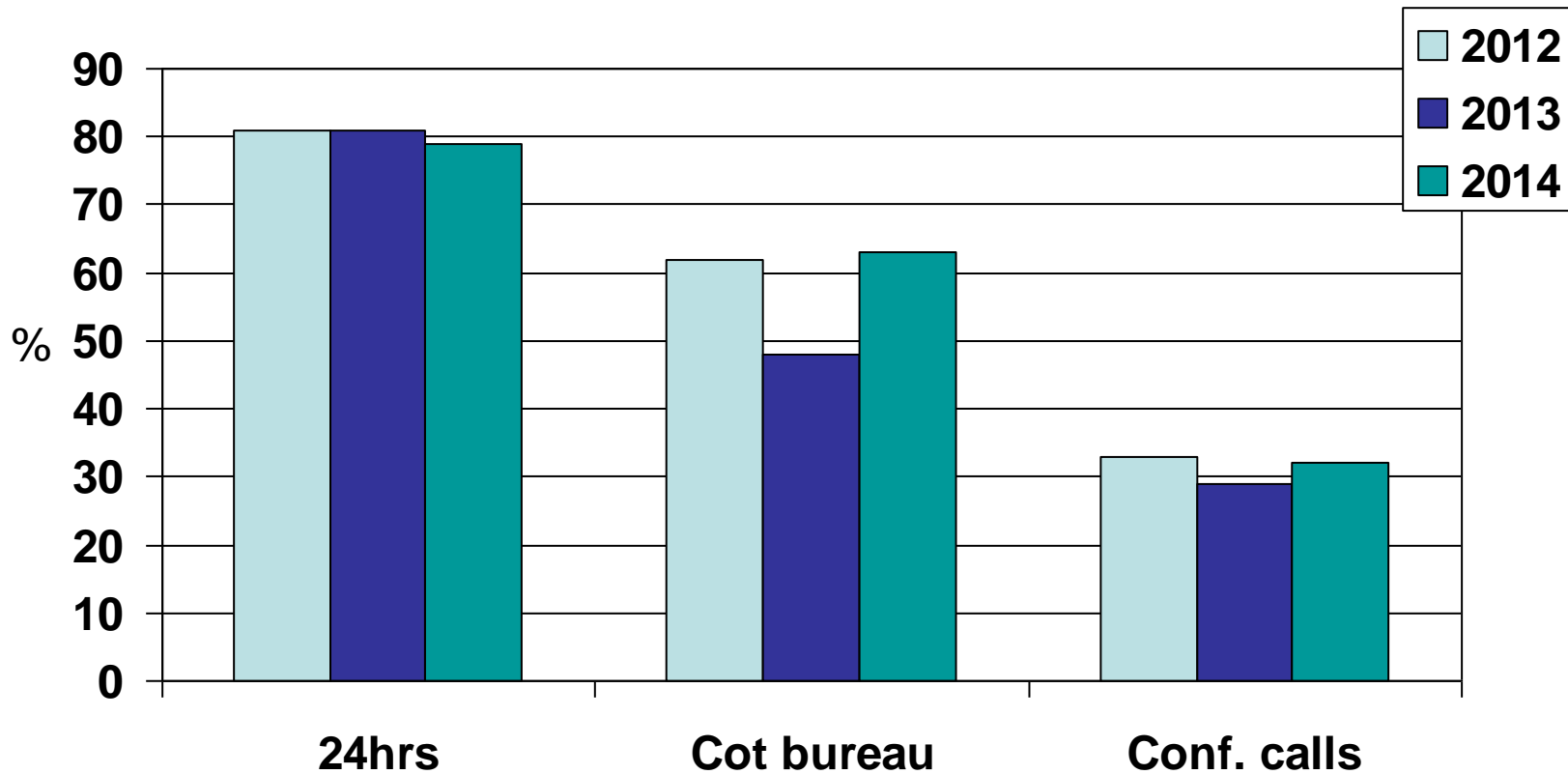
- Email to transport service's medical and nursing leads requesting activity data from 1.1.14 to 30.6.14
- Brief additional information about each service.



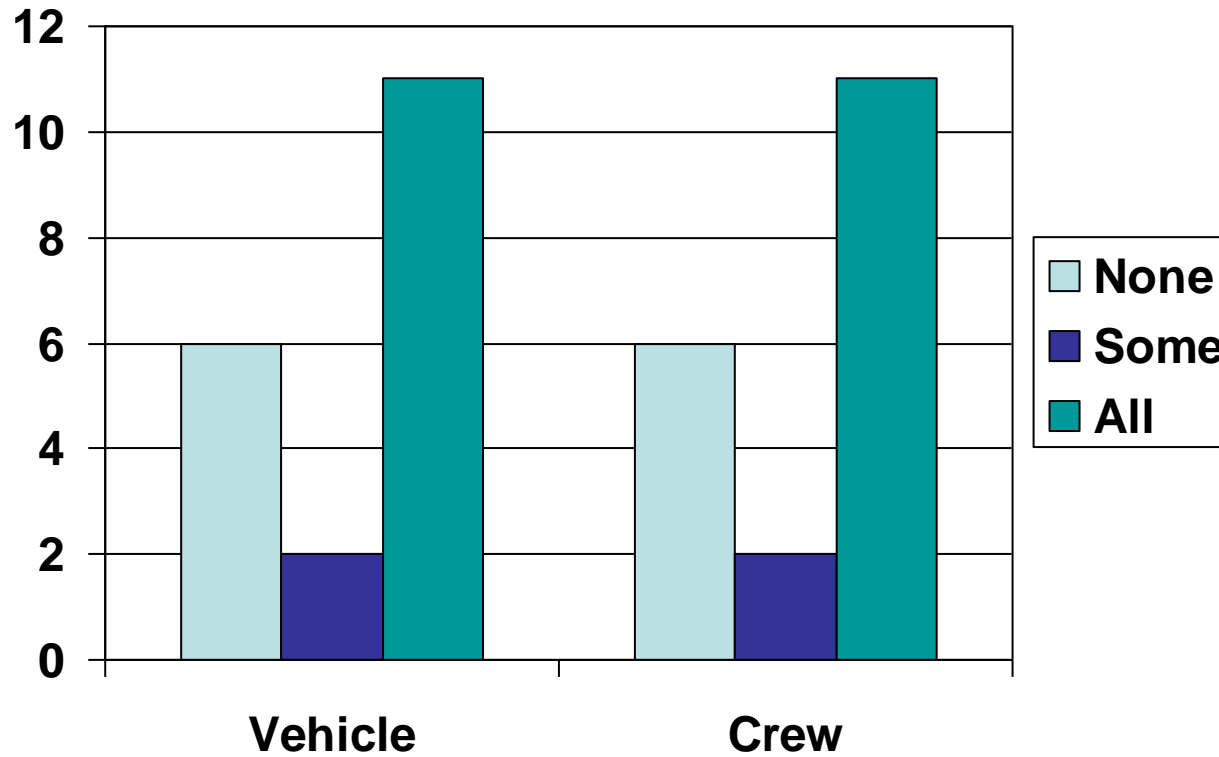
Number of services

- 2012 – data from 22
- 2013 – data from 21
- 2014 – data from 19
 - Scotland reported as one service, not 3

Service Characteristics

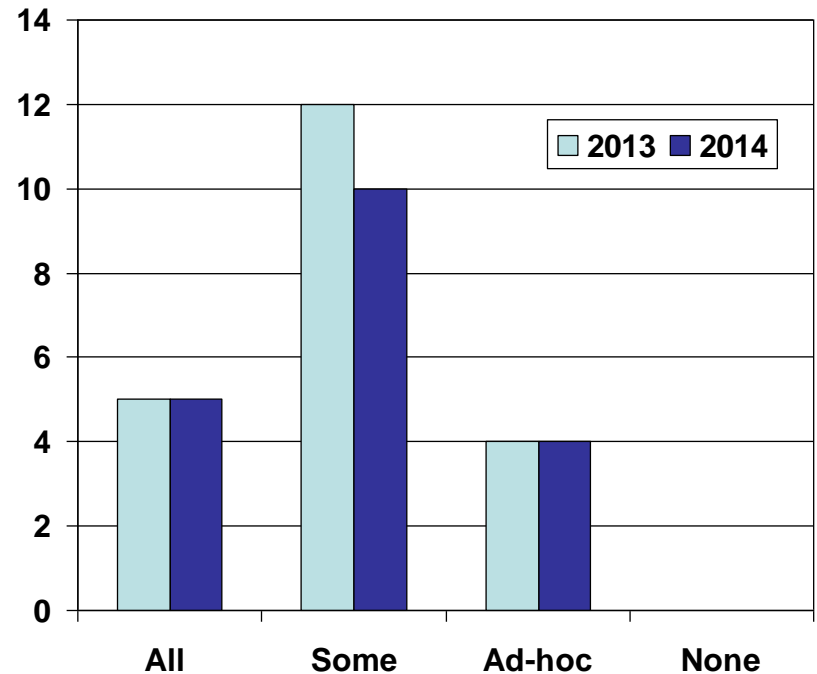


Dedicated vehicles & crews.

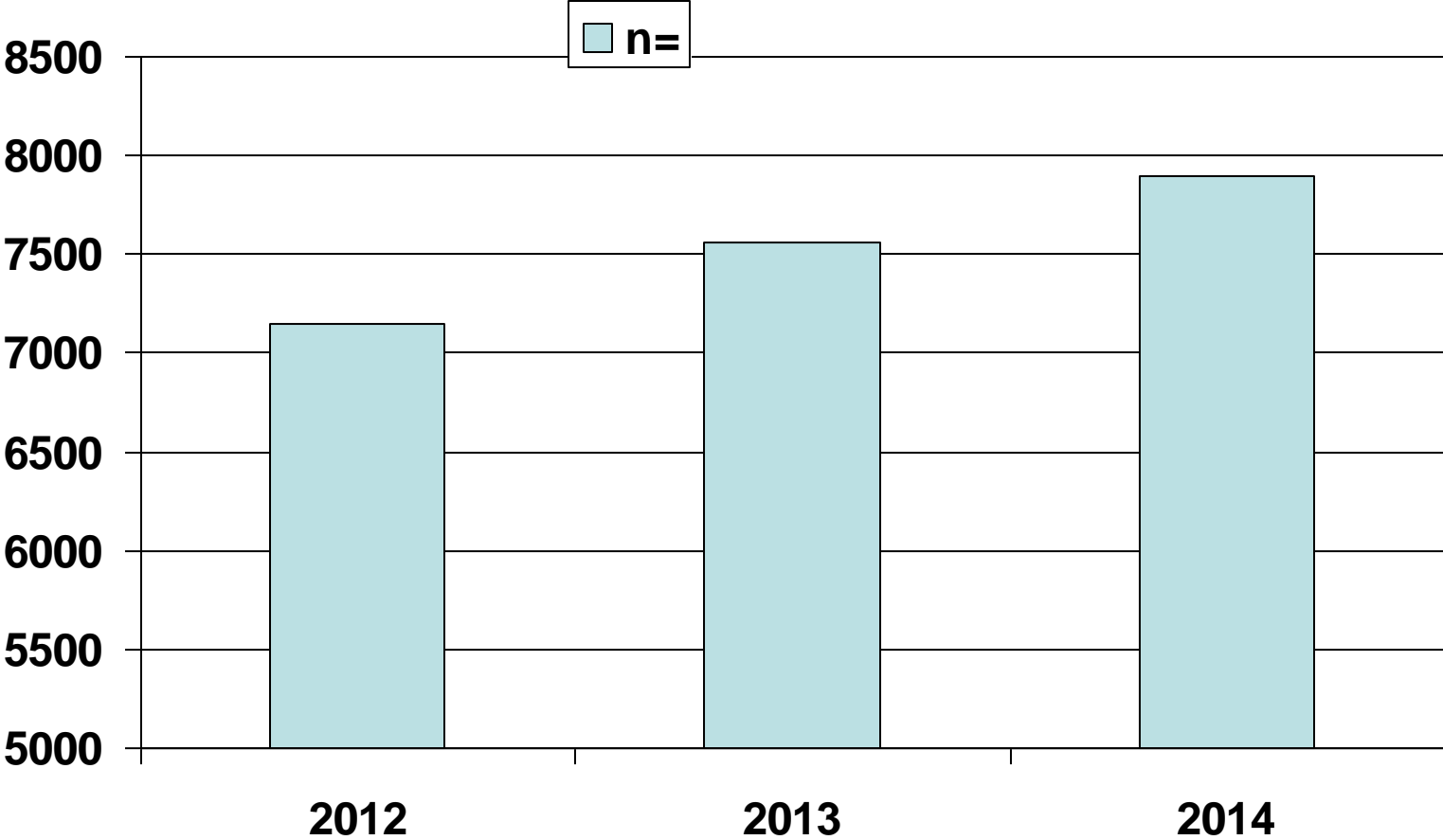


Consultants

- 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 2012, 2013, 2014



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	2012	2013	2014
Total transfers	7152	7562	7892 (+4%)

Effect of counting round trips as 2 transfers...

	2012-13	2013-14
Total CenTre transfers	1406	1518

Apparent workload increase = 112 transfers

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Apparent workload increase = 112 transfers

Effect of changing to counting round trips as 2 transfers accounts for 54 transfers

So the real workload increase is 58 transfers.

UK summary data Jan-Jun 2012, 2013, 2014

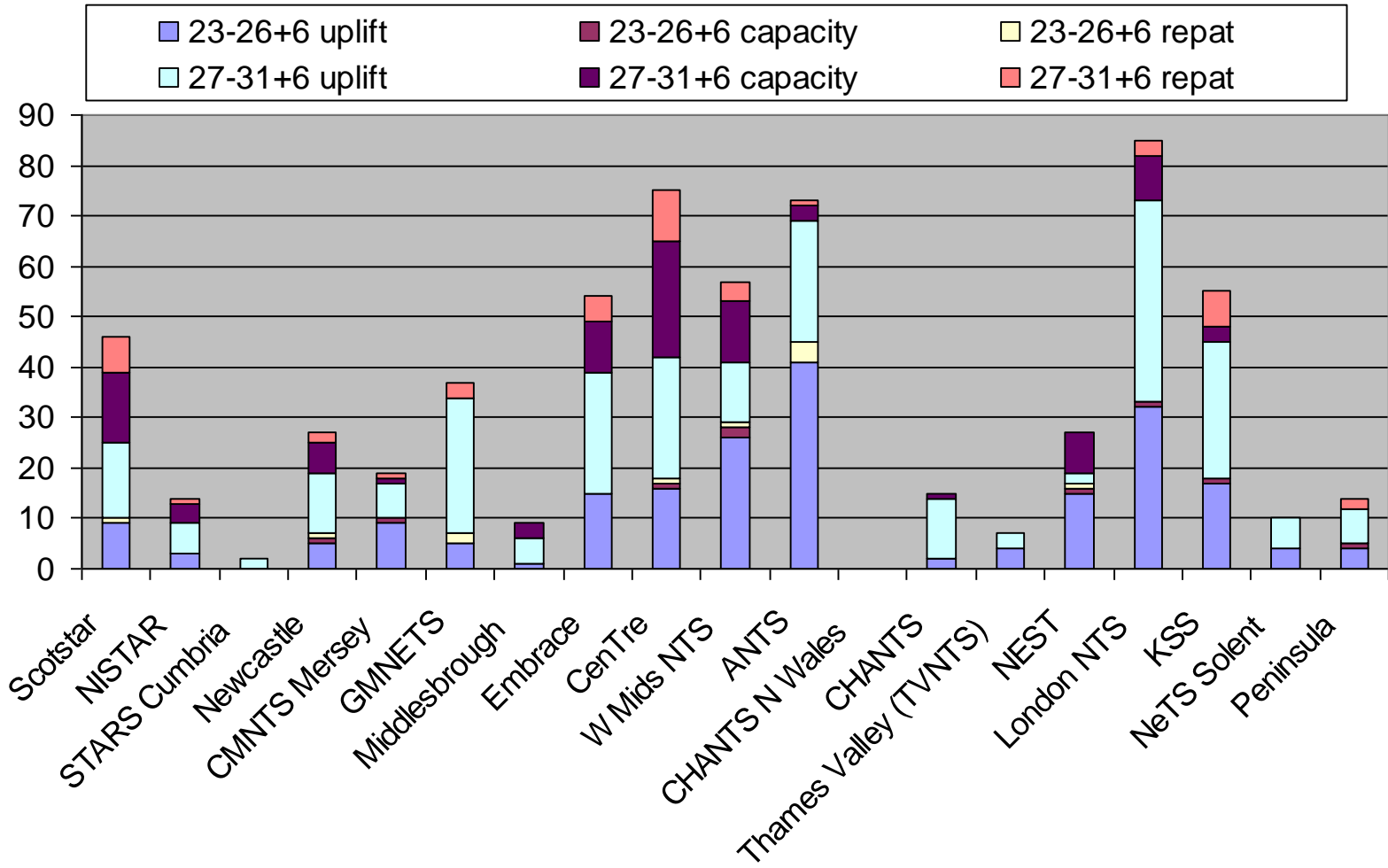
	2012	2013	2014
Total transfers	7152	7562	7892
Ventilated	1889 (26%)	1961 (26%)	1949 (25%)
CPAP/high-flow	847 (12%)	906 (12%)	819 (10%)
Cooling	247 (3%)	288 (4%)	249 (3%)
iNO	99 (1%)	111 (1%)	117 (1%)
Palliative	22 (0.3%)		19 (0.2%)

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

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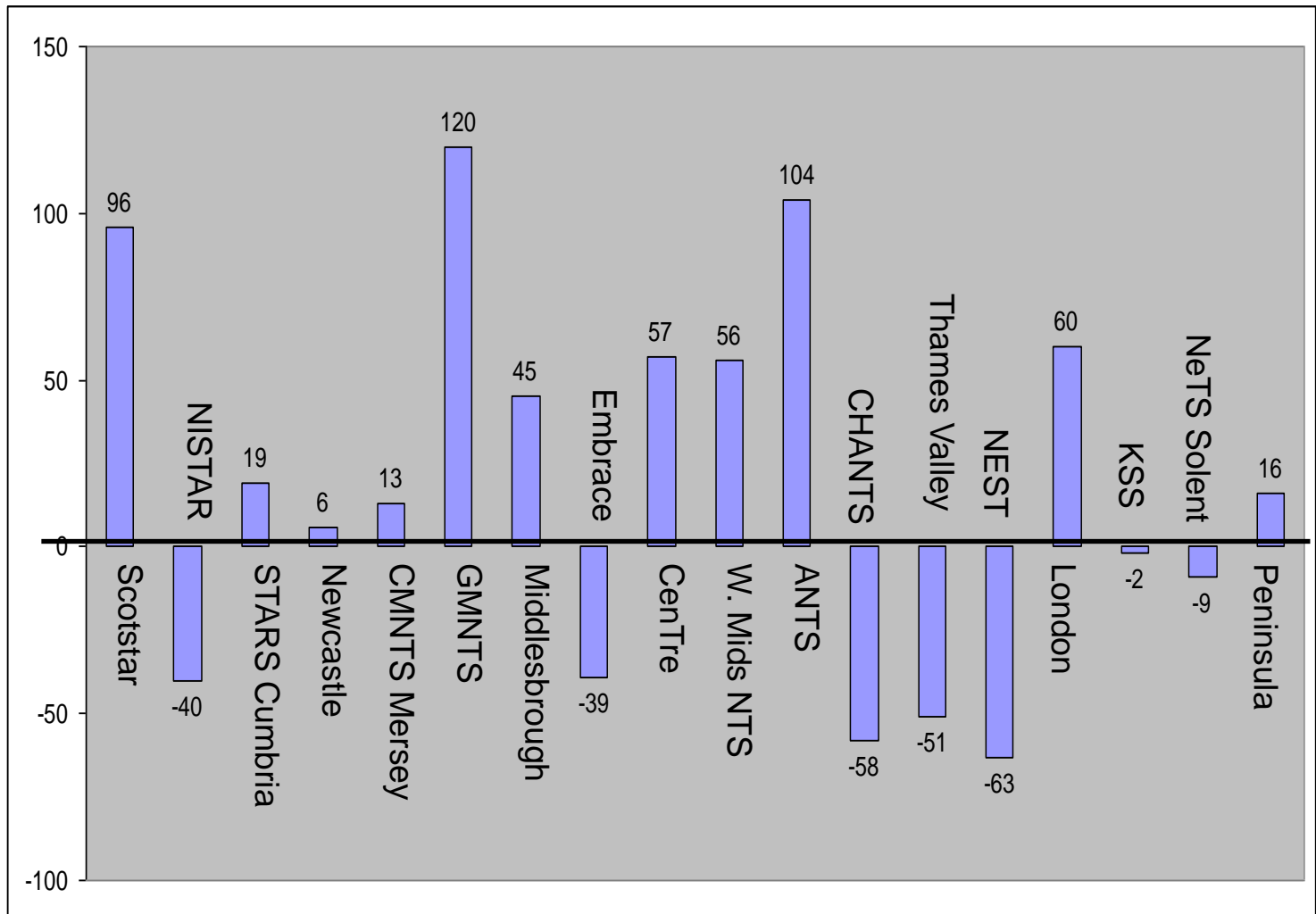
Gestation at birth	Uplift n=	Capacity n=	Repatriation n=	Total
23 ⁺⁰ to 26 ⁺⁶	208	9	11	228
27 ⁺⁰ to 31 ⁺⁶	255	97	46	398
Total	463	106	57	626

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

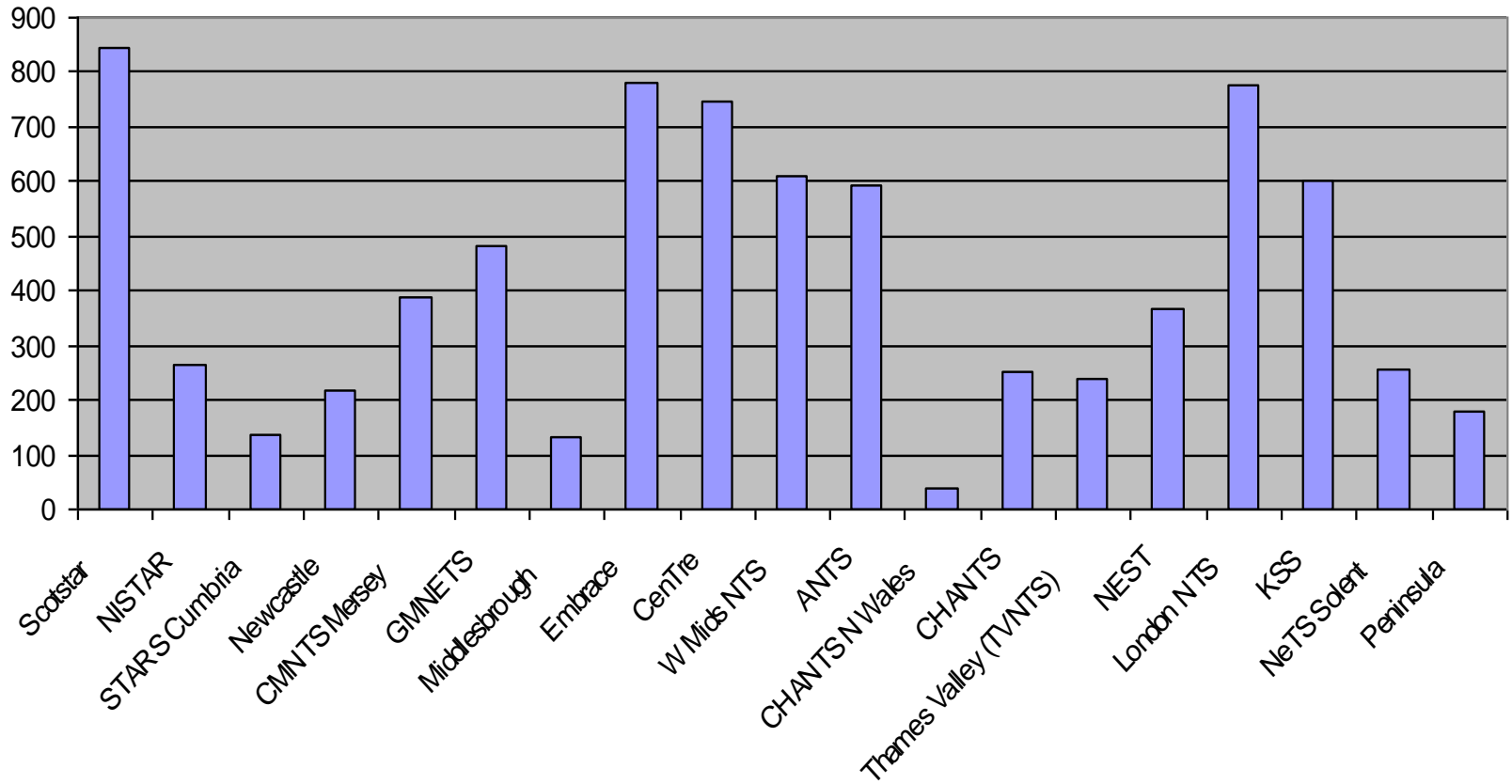


Change in workload/team 2013
(n=7562) to 2014 (n=7892)

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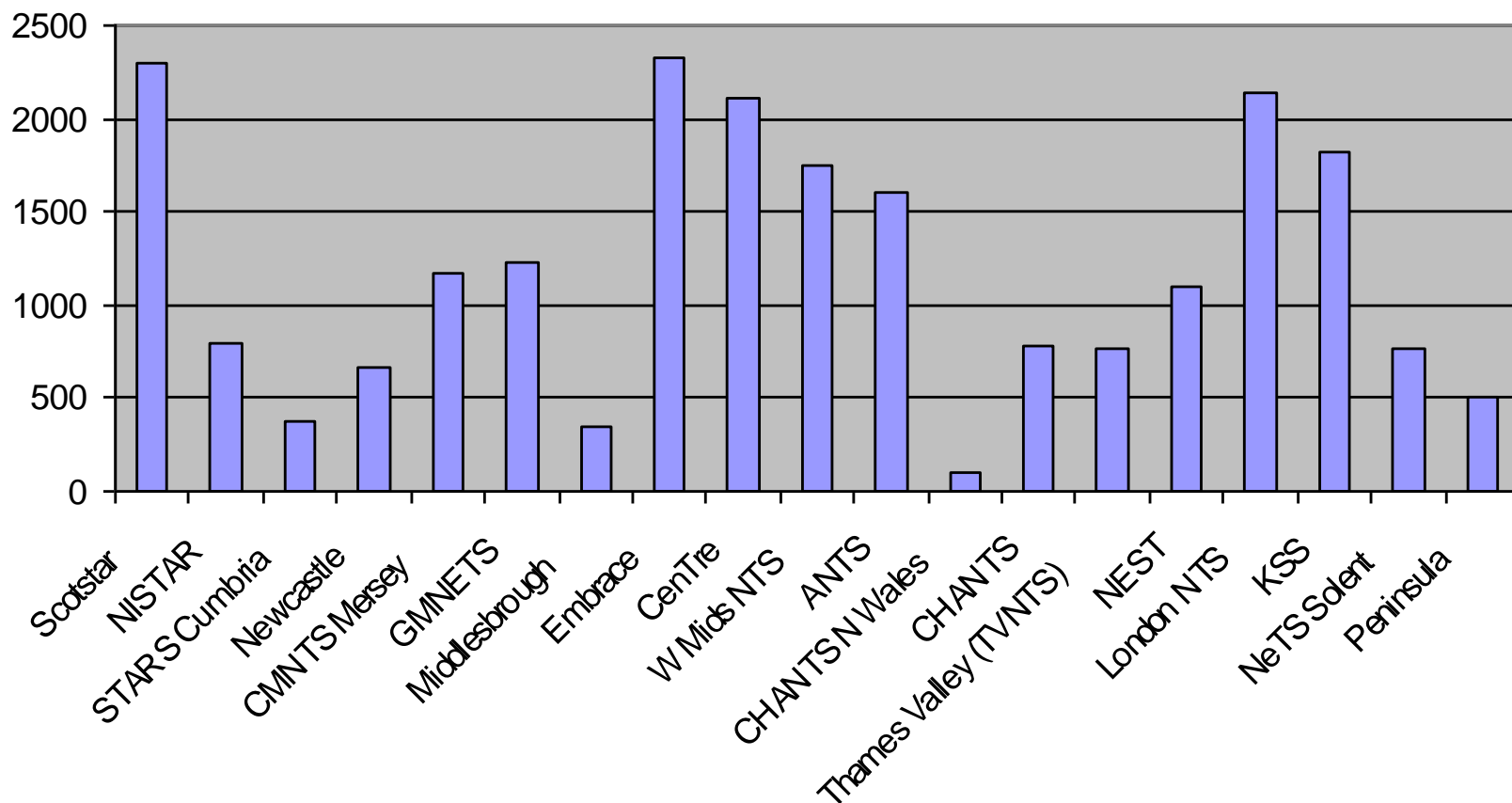


Total Transfers/team, Jan – June 2014

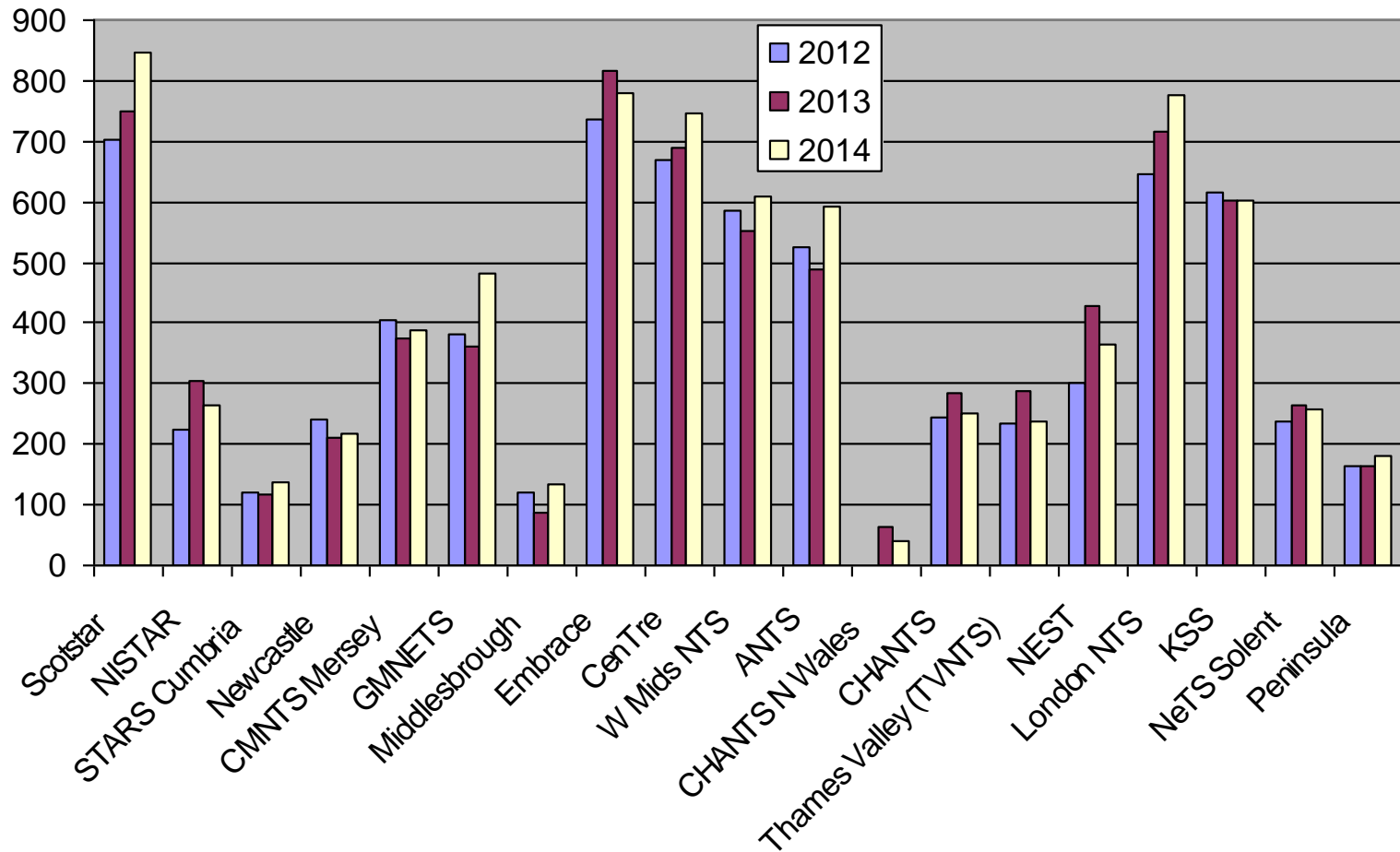


All transfers, 2012-14

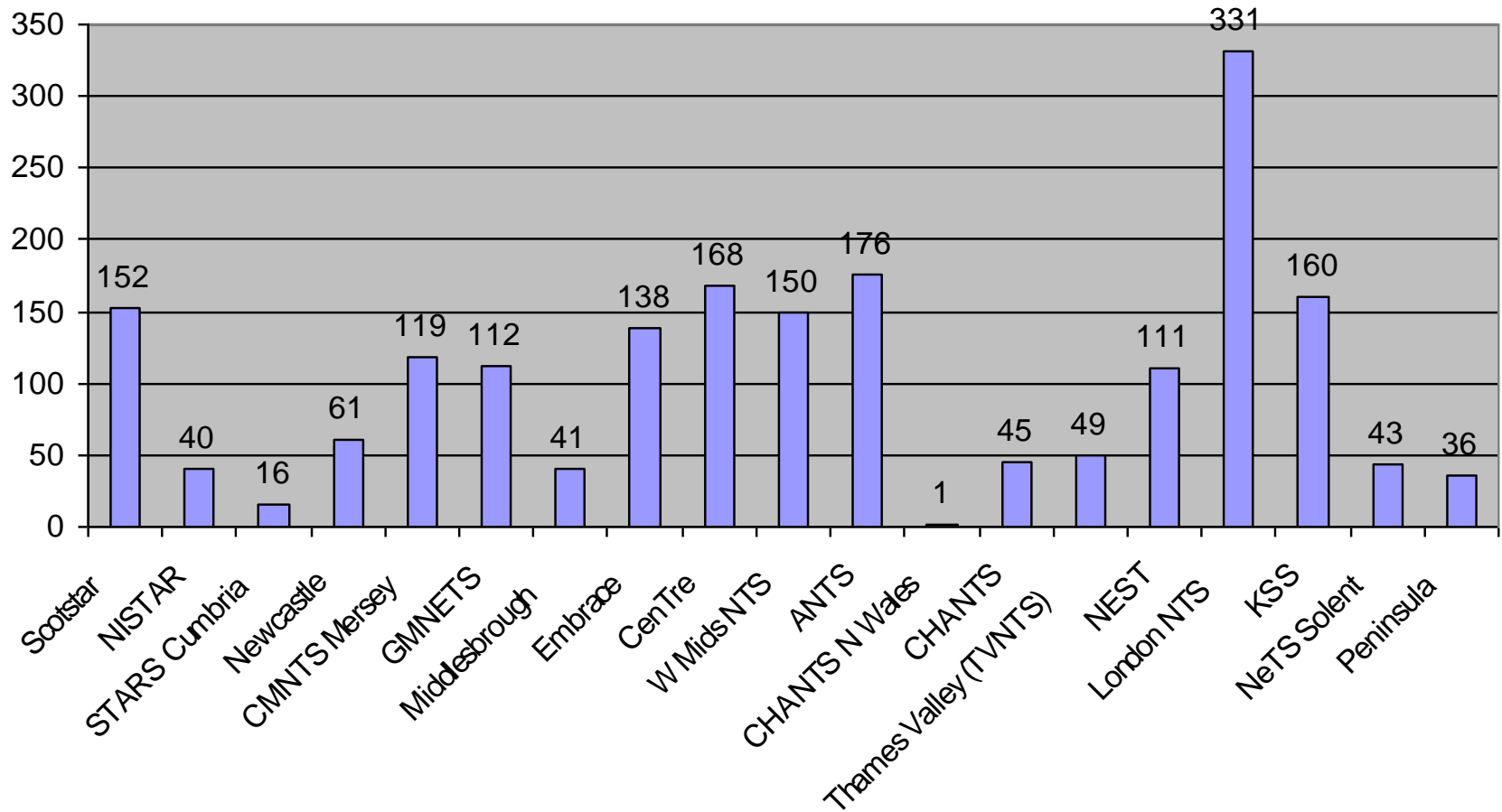
2012-14



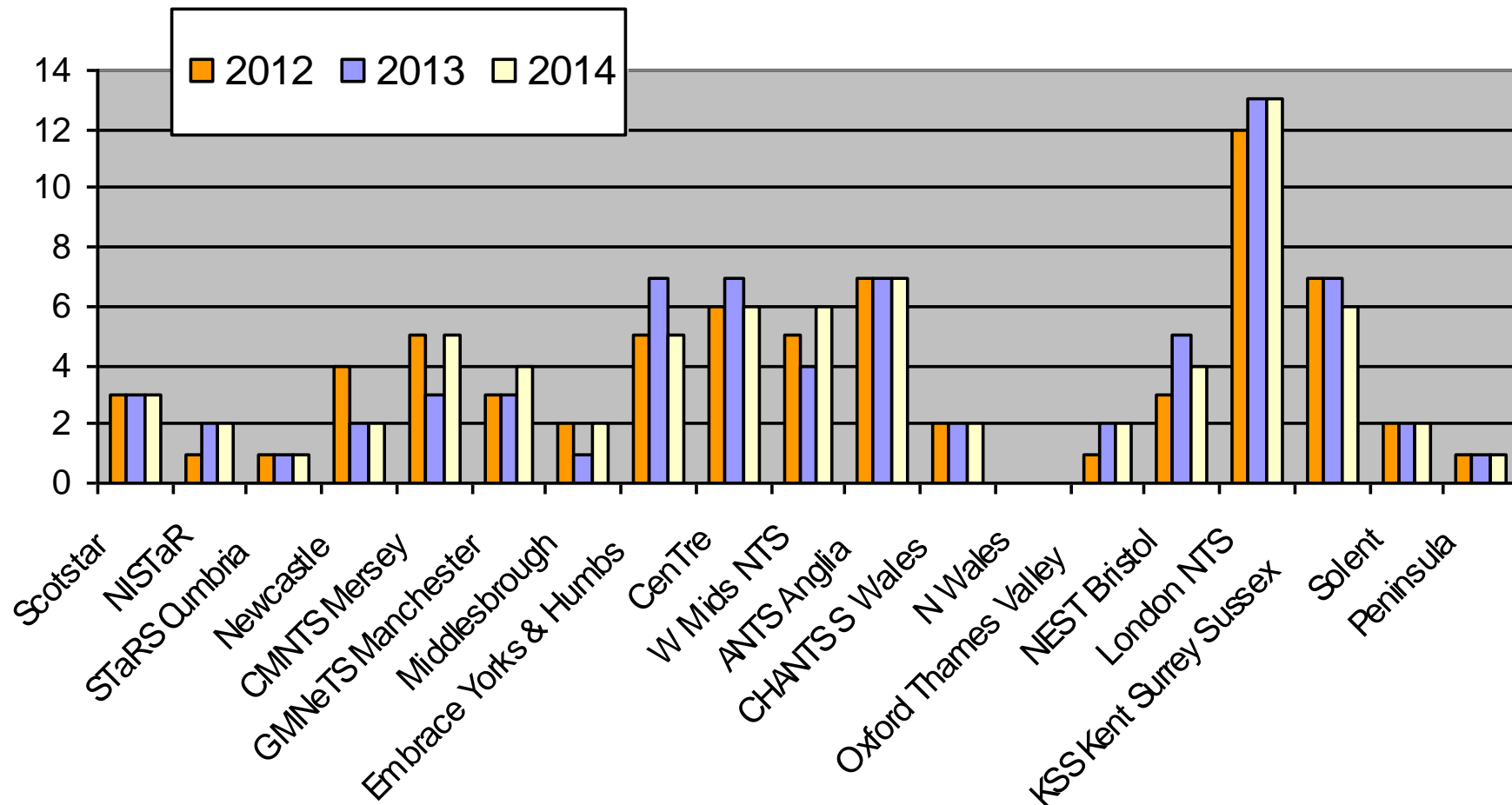
All transfers, 2012-14 (1st 6 months of each)



Number of ventilated transfers, Jan-Jun 2014.



Average number ventilated transfers/week Jan – June 2012, 2013, 2014



Response standards

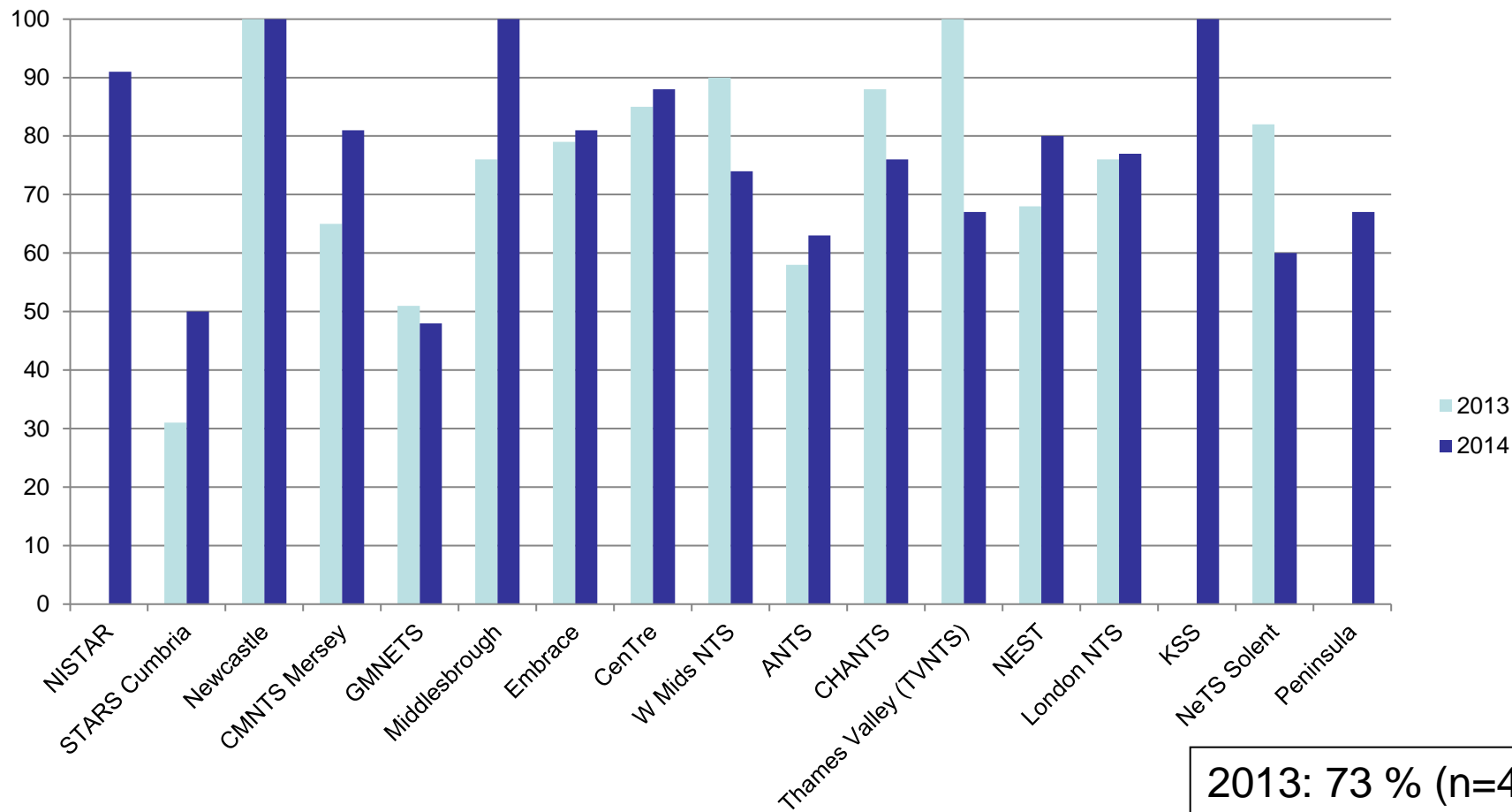
Data on

- Time critical (all)
- Time critical at base
- Referral response time
- Uplift transfers performed

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

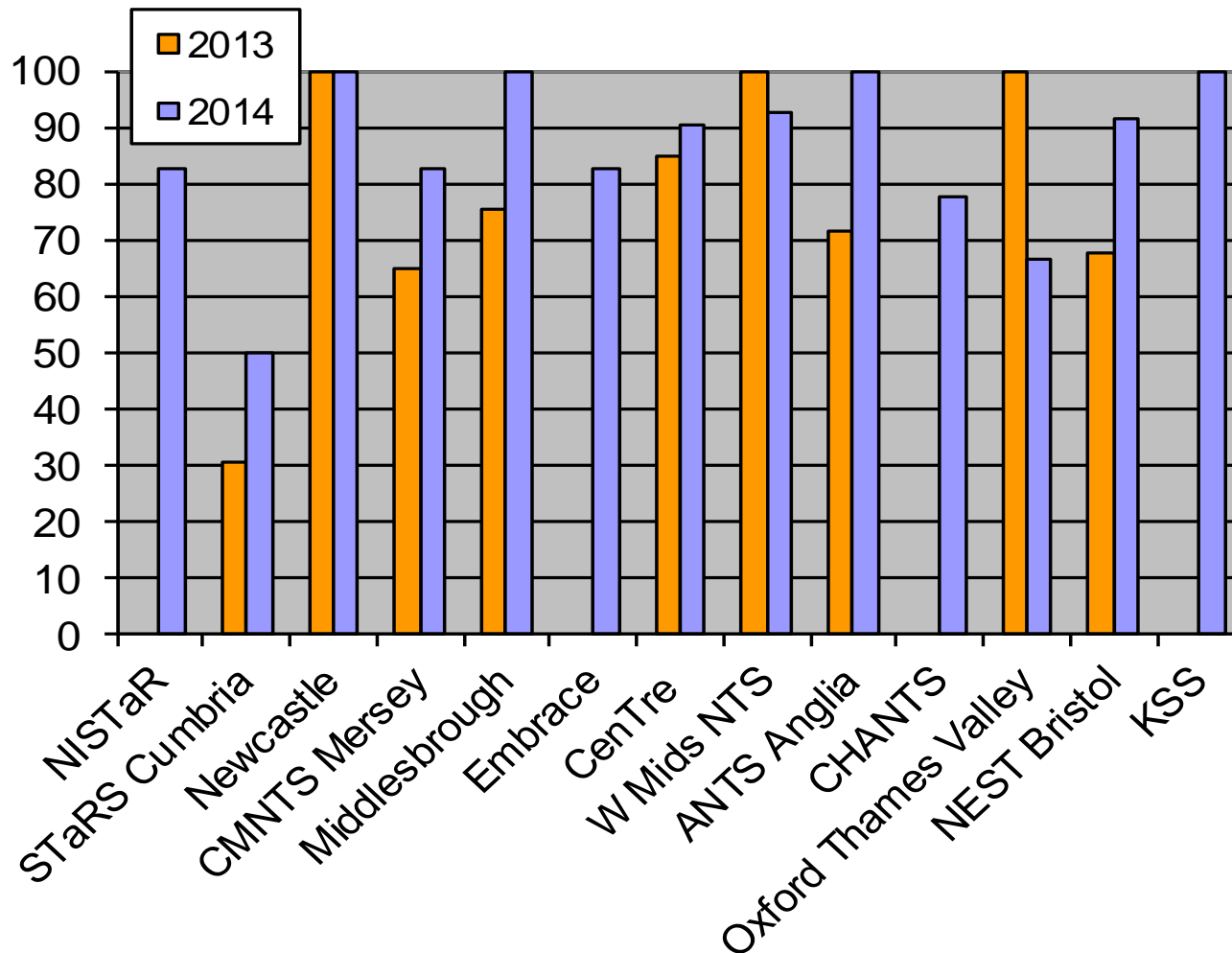
2013: 73 % (n=404)
2014: 77% (n=409)

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



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

% of time critical transfers team mobile within 60 minutes of start of referring call (calls taken at base)

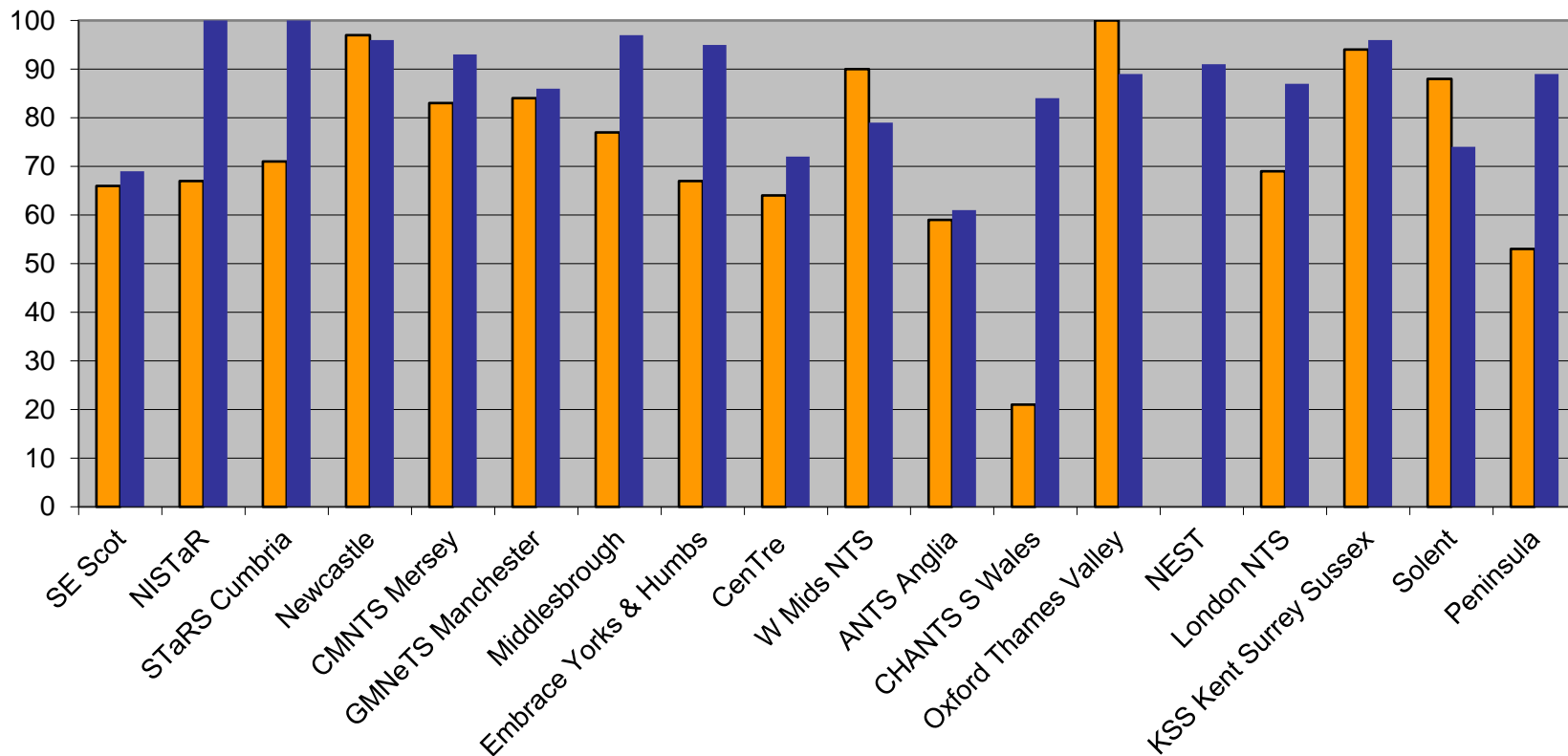


Team arrived with the patient within 3.5 hours of the start of the referring call (Intensive care; uplift) (%), Jan-Jun 2013, 2014.

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

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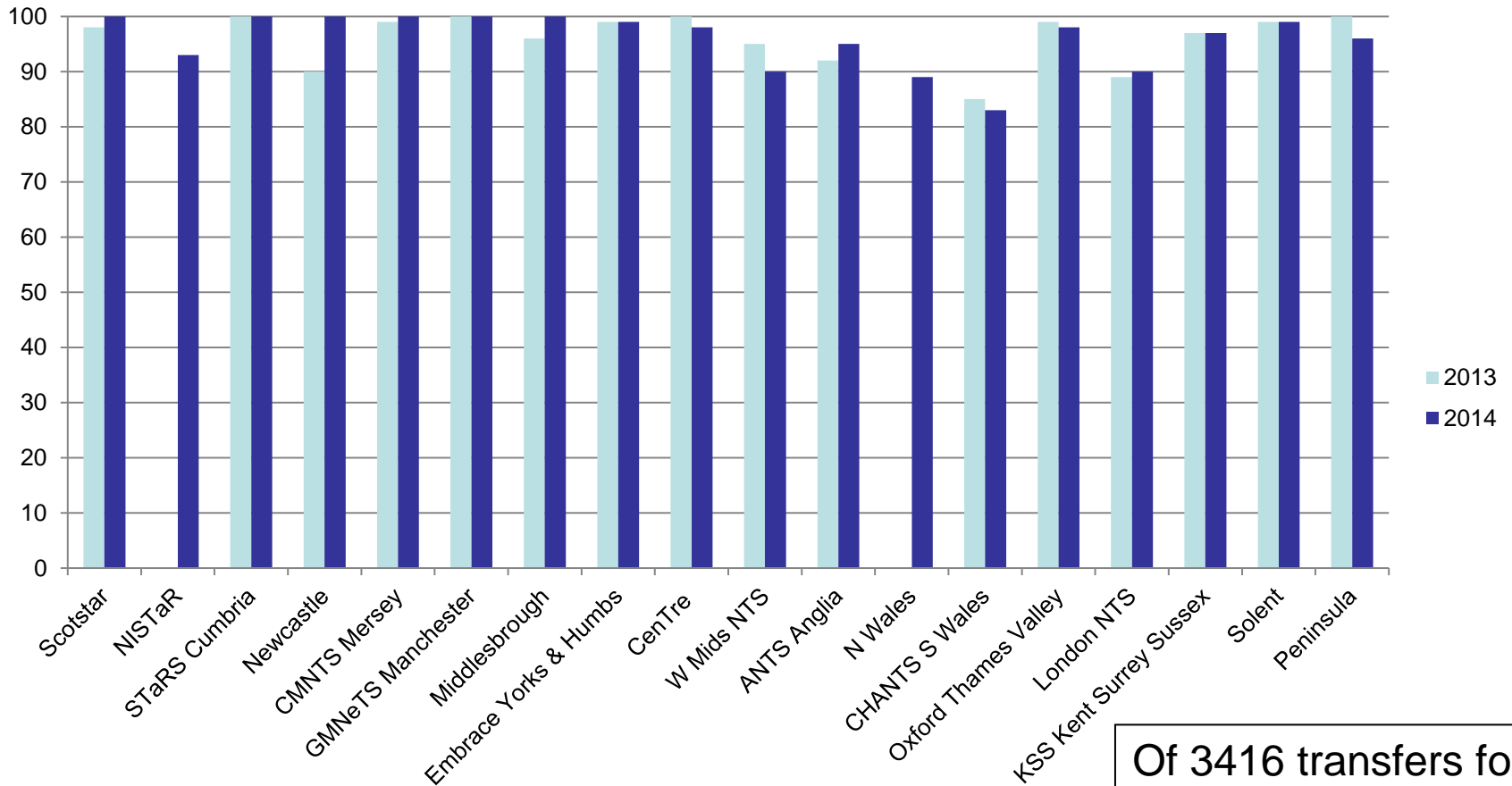


2013: 72% (n=1689)
2014: 86% (n=1836)

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

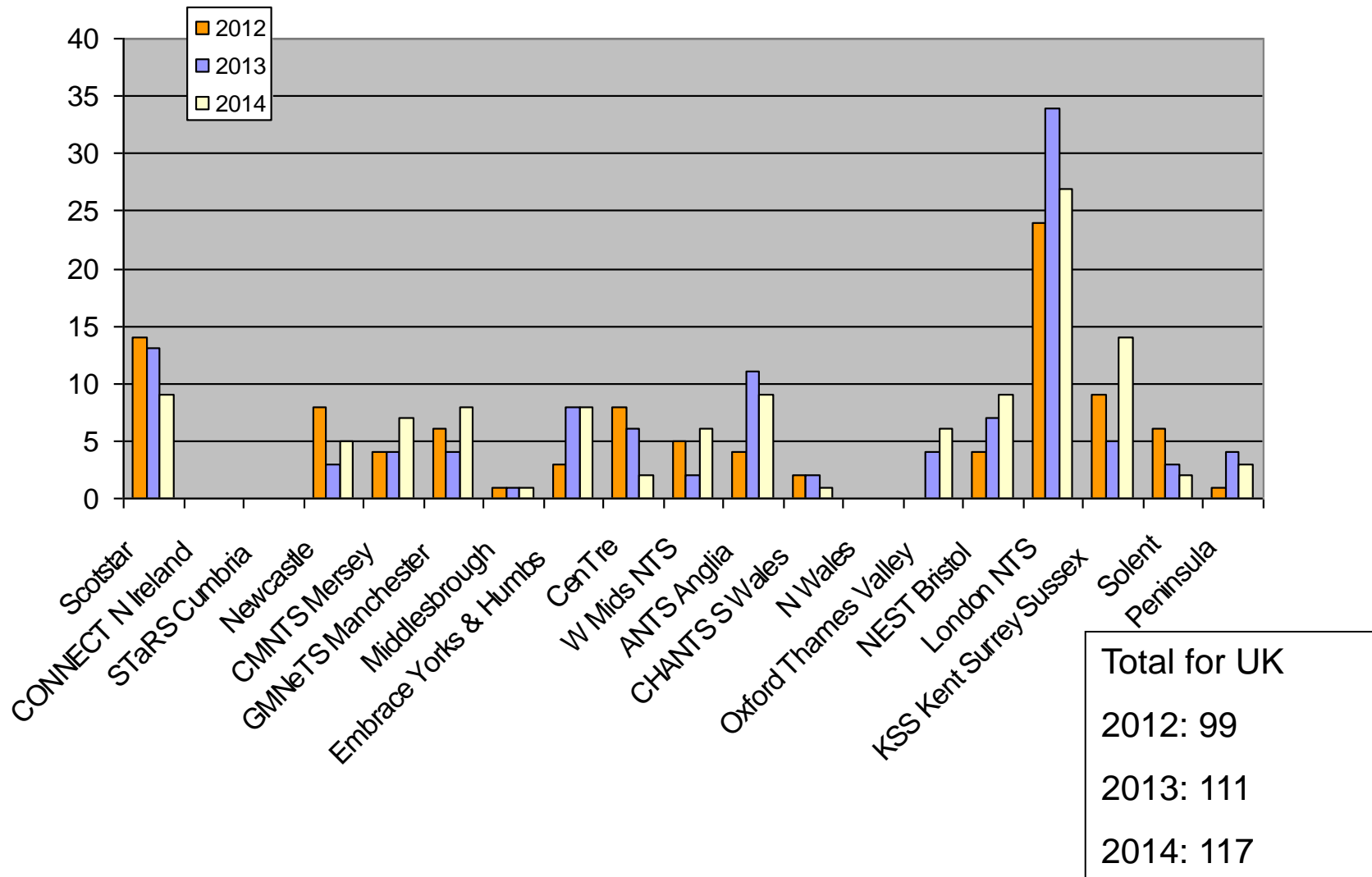
- Counting what we don't do is difficult.

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



Of 3416 transfers for uplift, 3097 were done by their commissioned team (91%)

Number transferred on iNO – Jan – June 2012, 2013, 2014



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

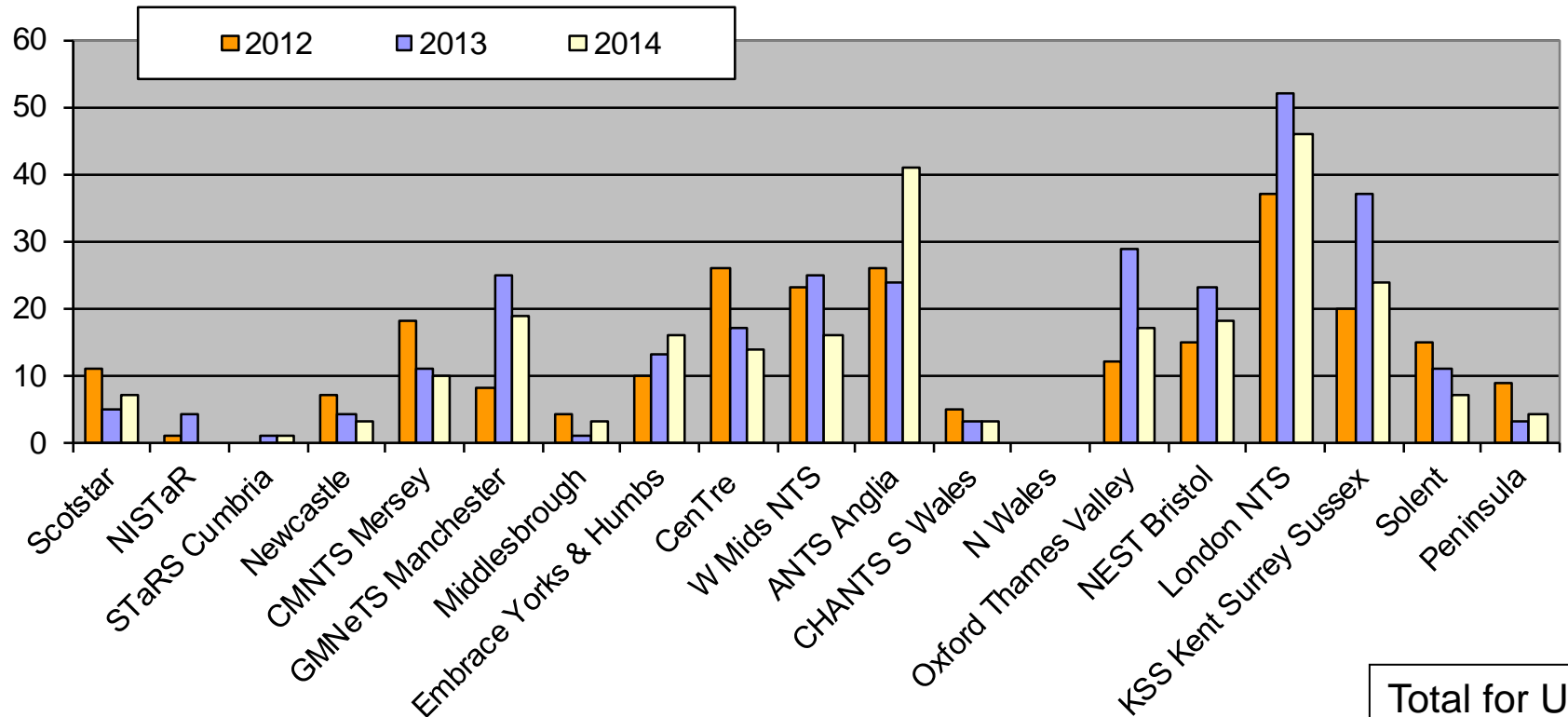
Total for UK

2012: 247

2013: 288

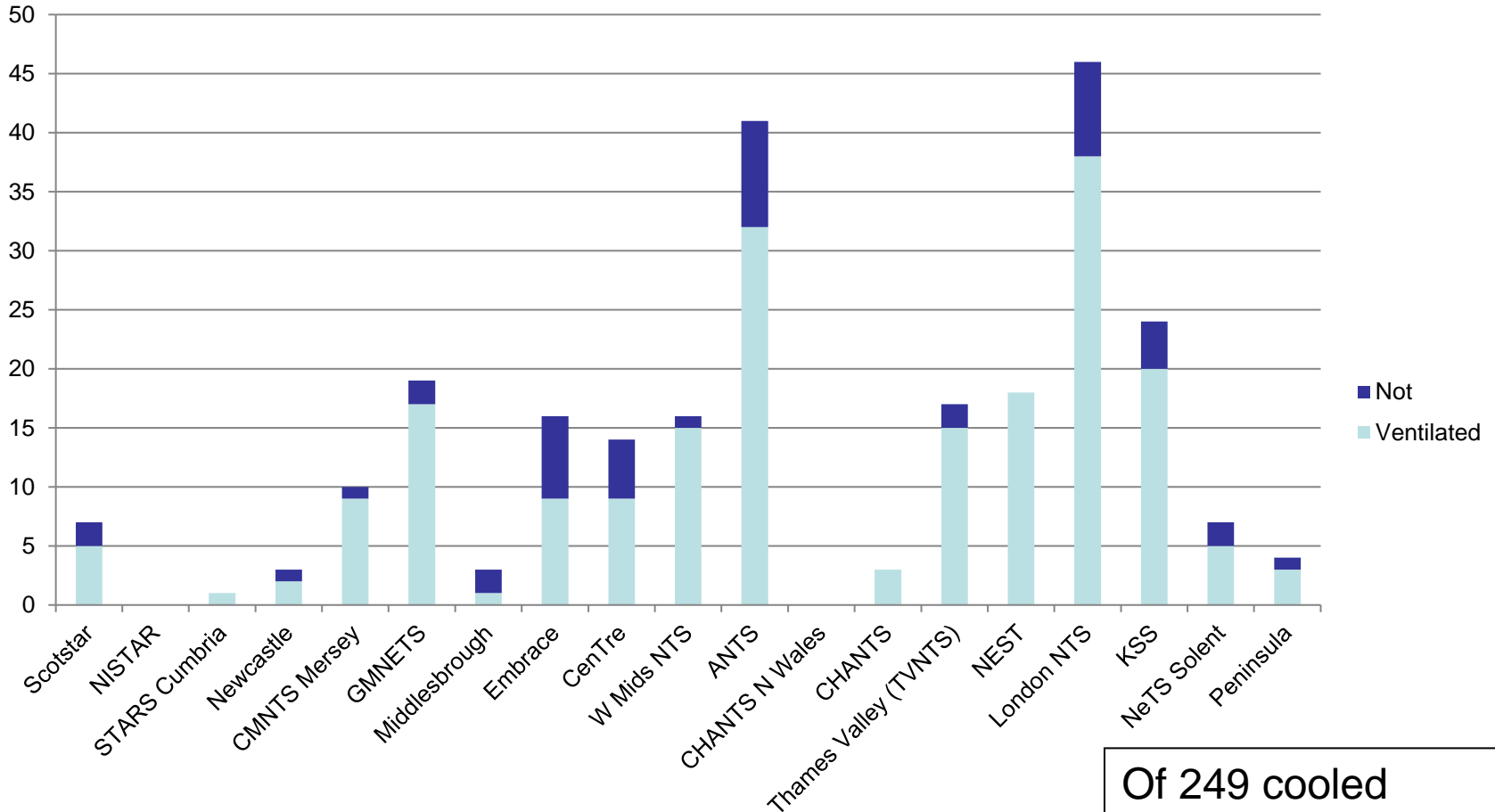
2014: 249

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



Total for UK
2012: 247
2013: 288
2014: 249

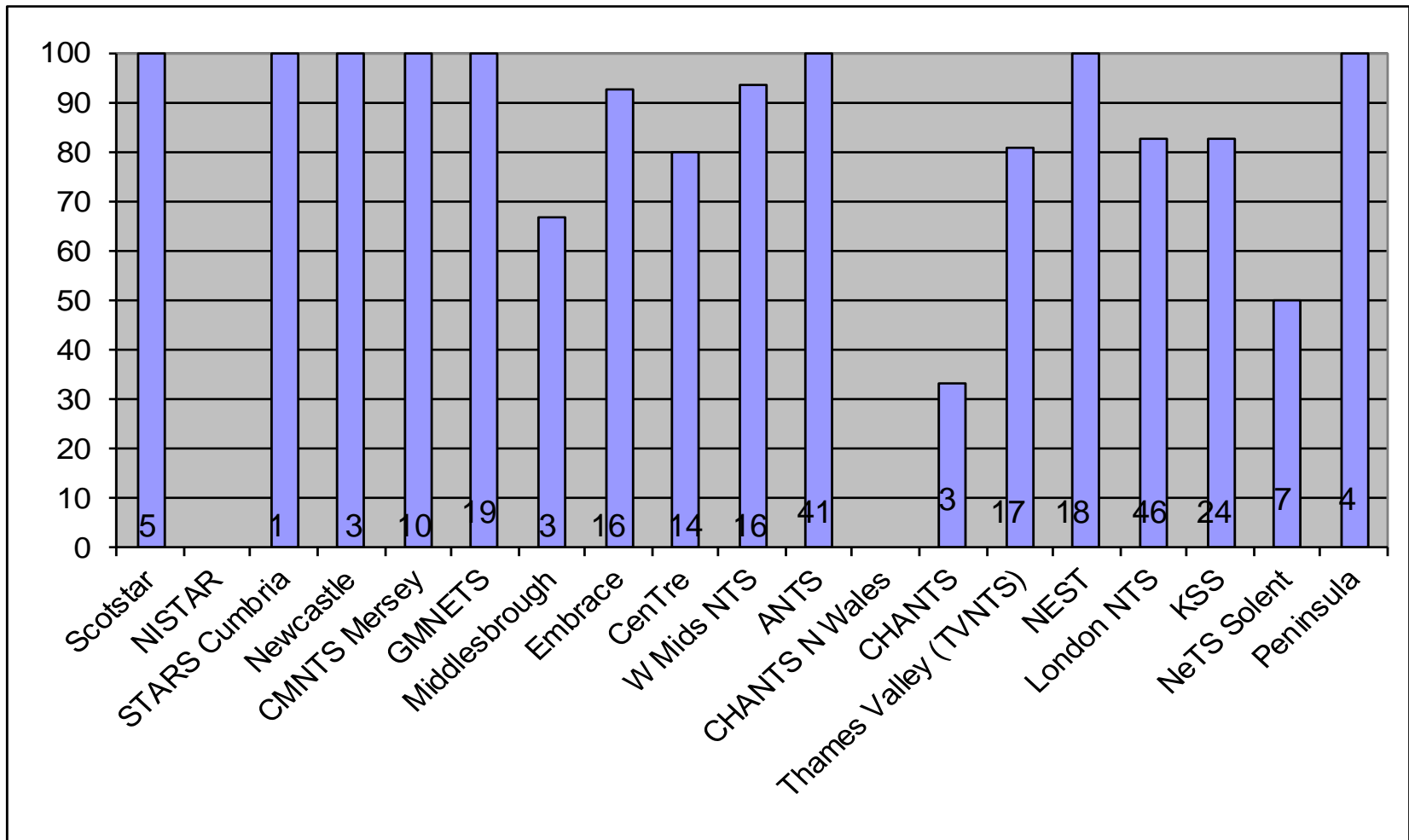
Cooling, ventilated Jan – June, 2014 (n=)



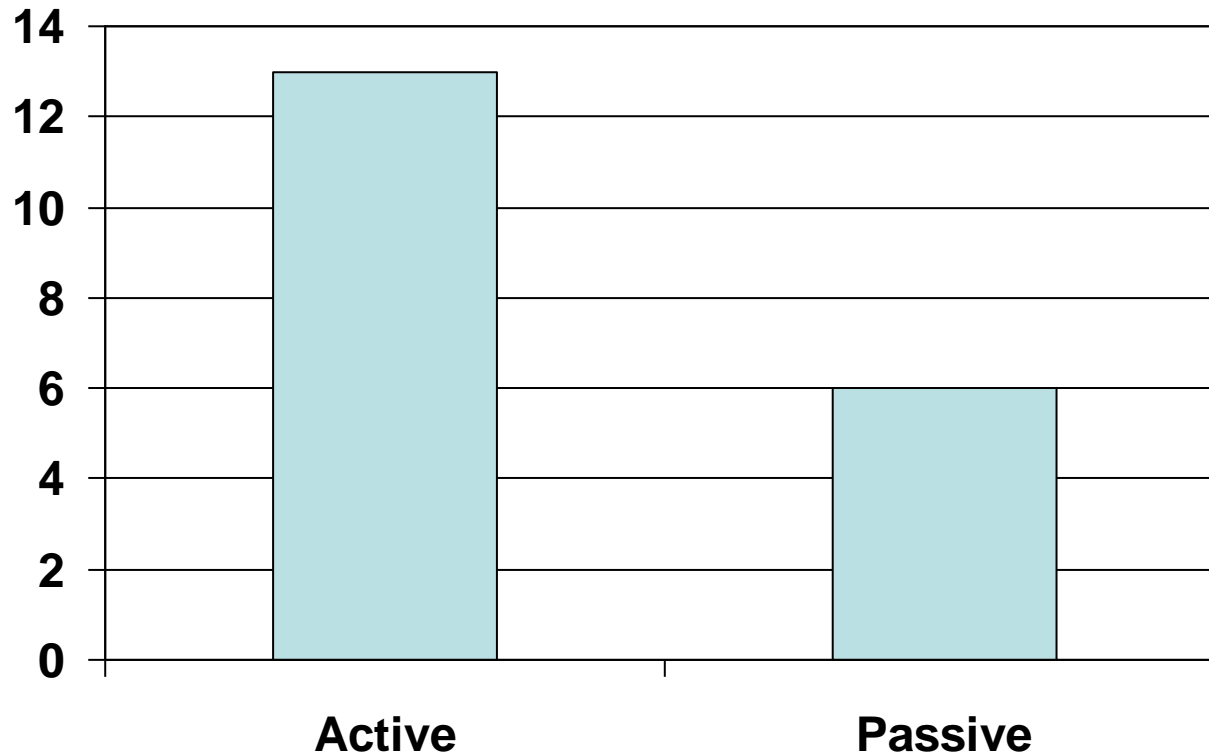
Of 249 cooled infants transferred, 202 are ventilated. (33% - 100%)

Transferred for cooling, >6h at
completion, temp 33-34⁰C (%)

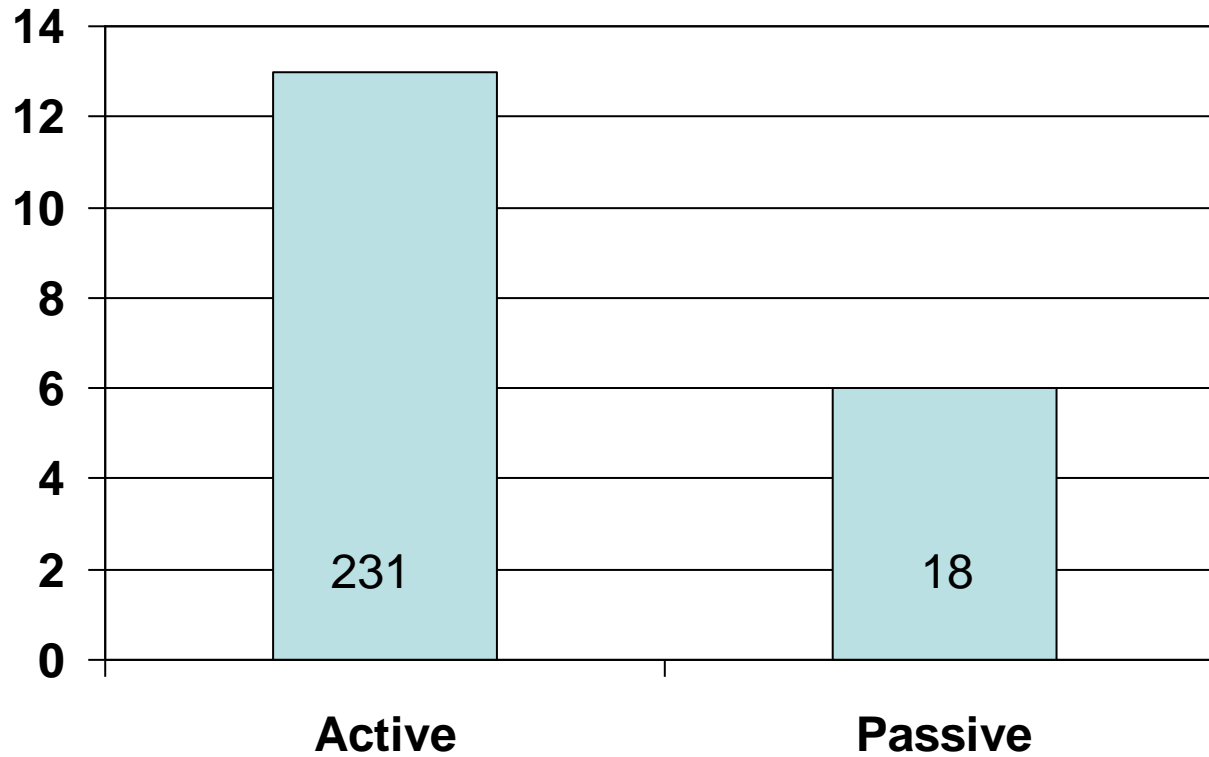
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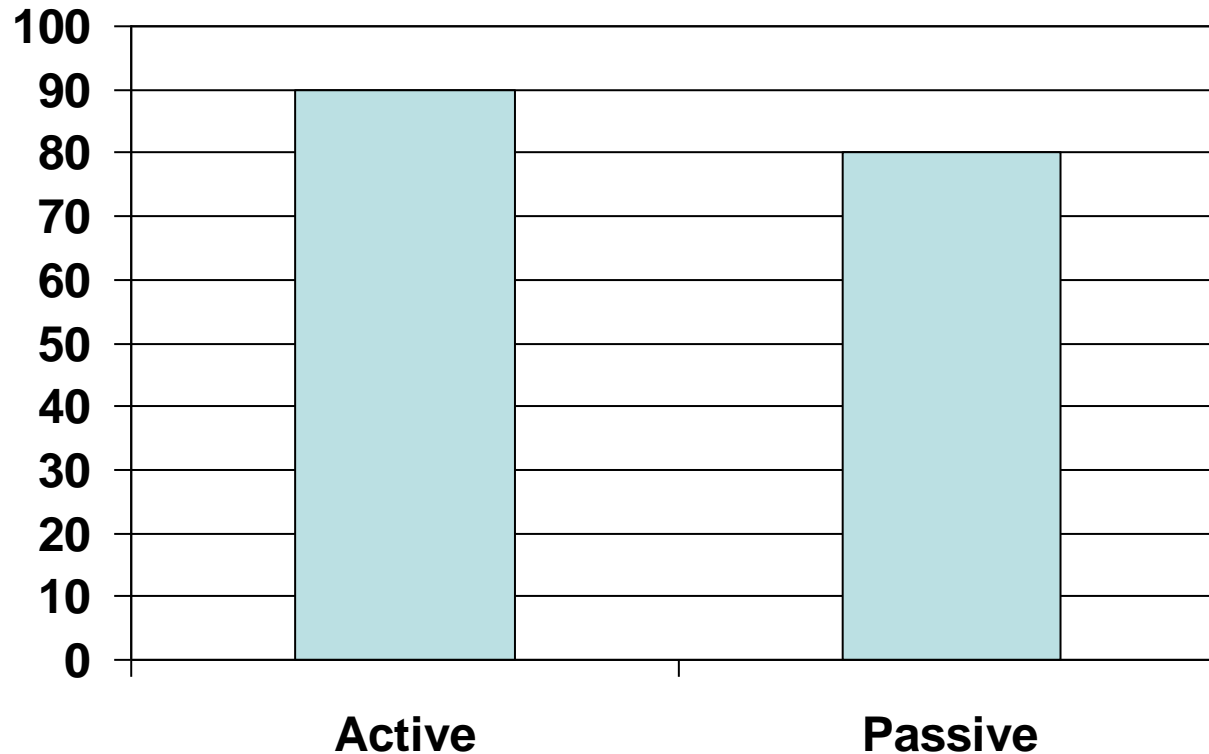
Active vs. passive cooling, number of teams.



Active vs. passive cooling, number of teams.



Active vs. passive, infants >6h, temp 33-34°C (%)



Over and under-ventilation

- $p\text{CO}_2 < 4$ kPa

- $p\text{CO}_2 > 7$ kPa and $\text{pH} < 7.2$

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

Over and under-ventilation

- Note that not all infants had $p\text{CO}_2$ available post-transfer.

Over and under-ventilation

Over ventilated (pCO₂ <4kPa)

2013 (n=1355)

2014 (n=1895)

n=(%)

n=(%)

118 (9)

106 (5)

Over and under-ventilation

Over ventilated ($p\text{CO}_2 < 4\text{kPa}$)

2013 (n=1355)

2014 (n=1895)

n=(%)

n=(%)

118 (9)

106 (5)

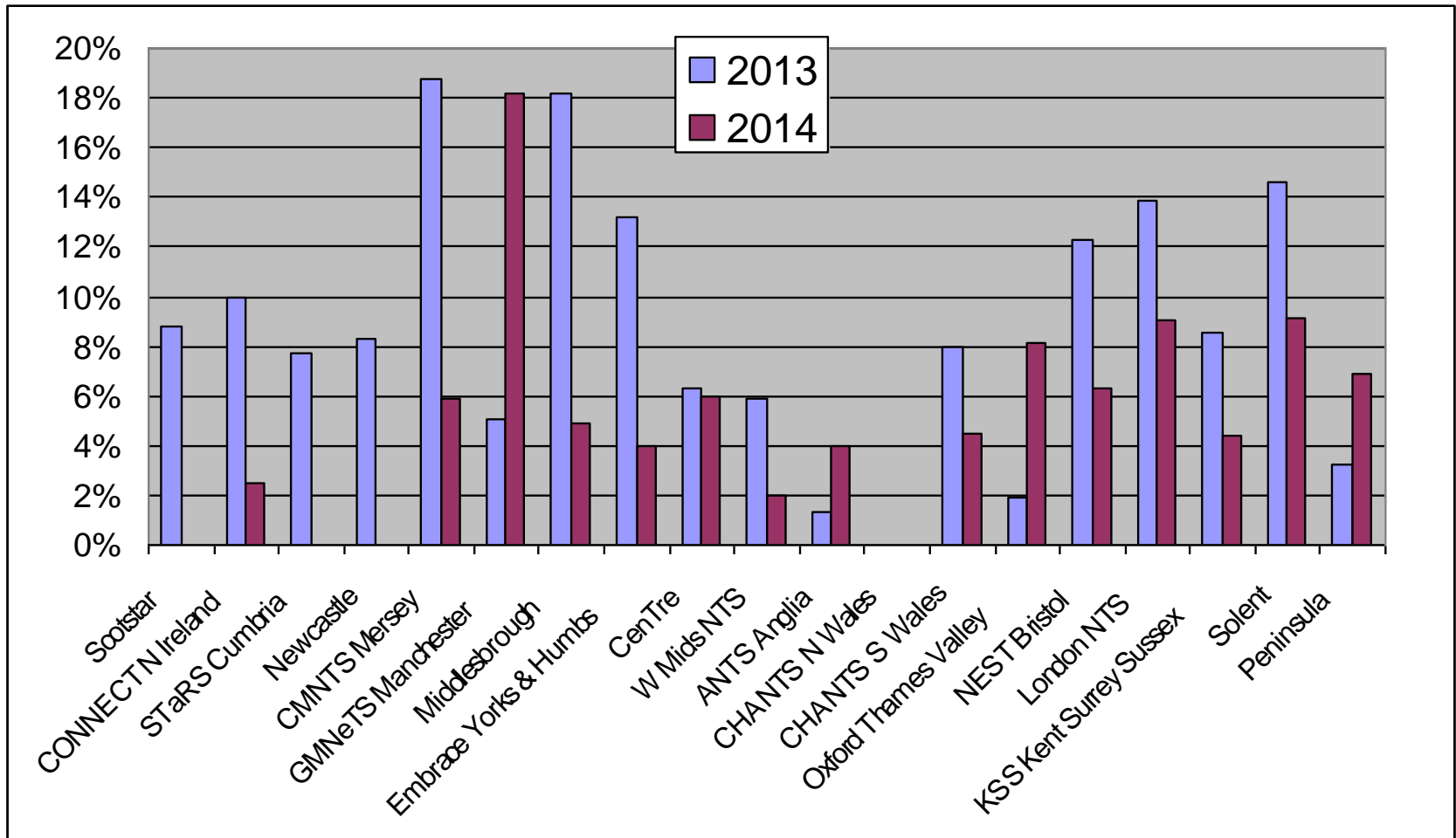
Under-ventilated ($p\text{CO}_2 > 7\text{kPa}$ & $\text{pH} < 7.2$)

2014 (n=1895)

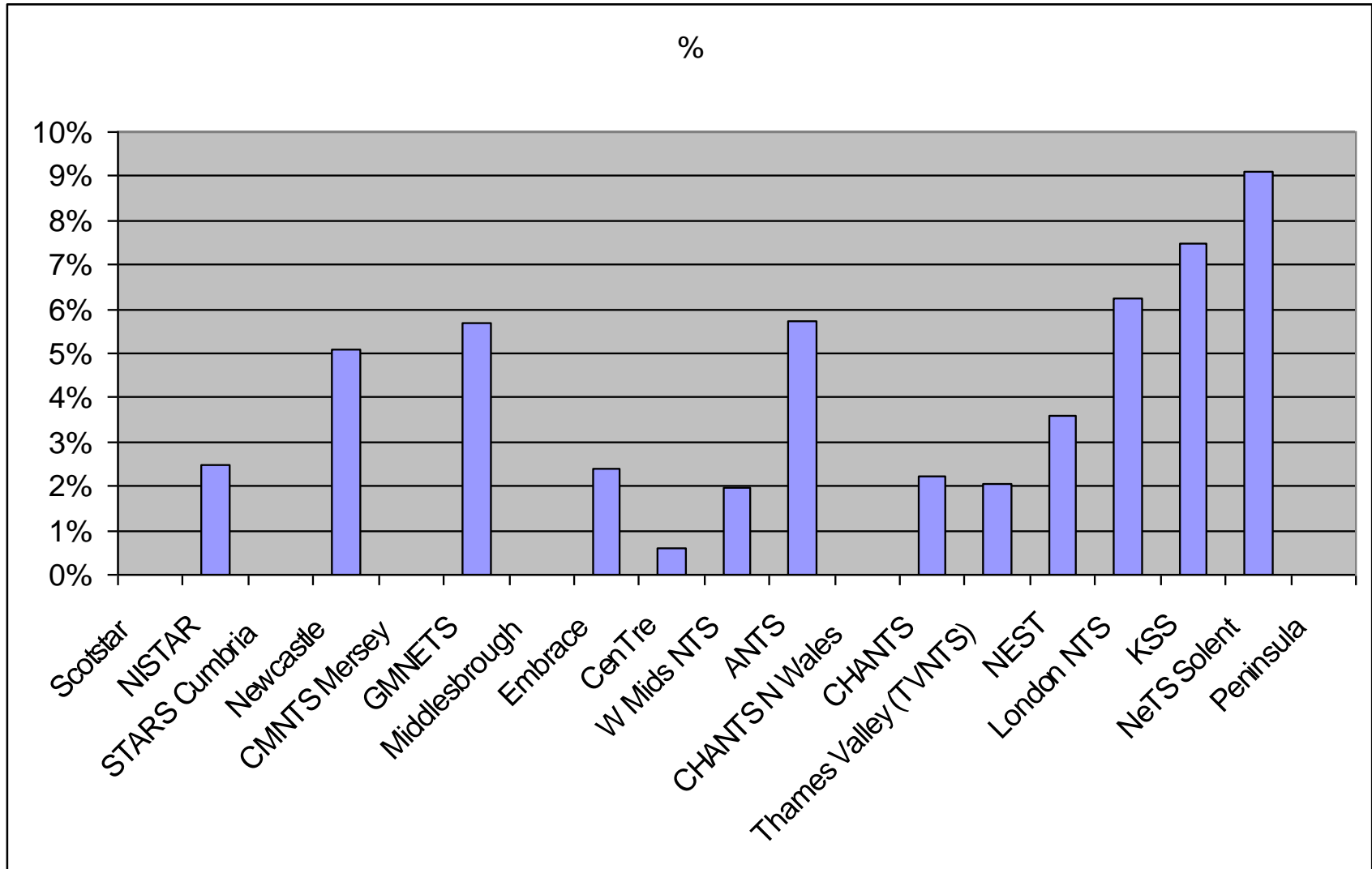
n=(%)

68 (3)

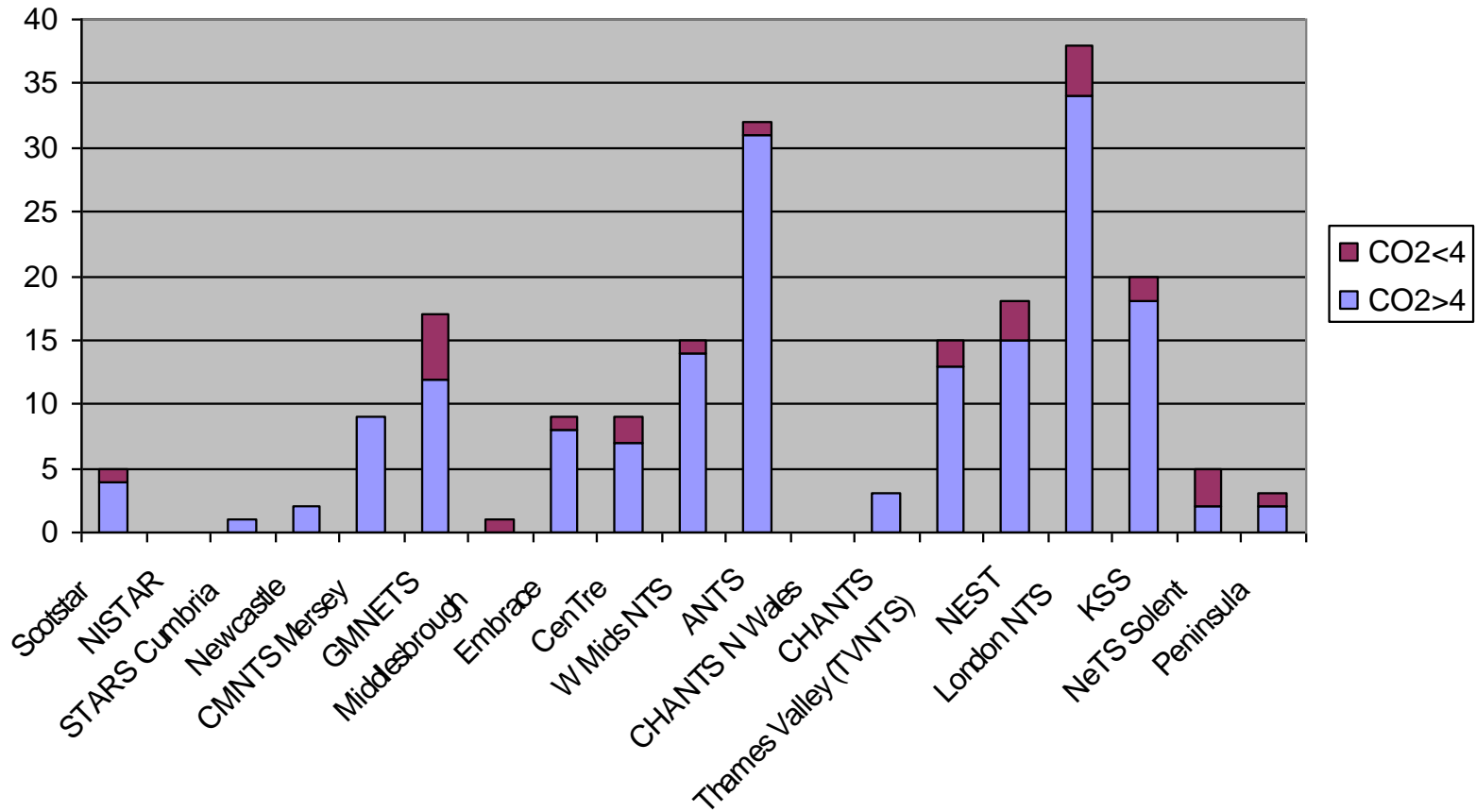
% pCO₂ <4 kPa on completion , per service.
 Jan – June 2013, 2014.



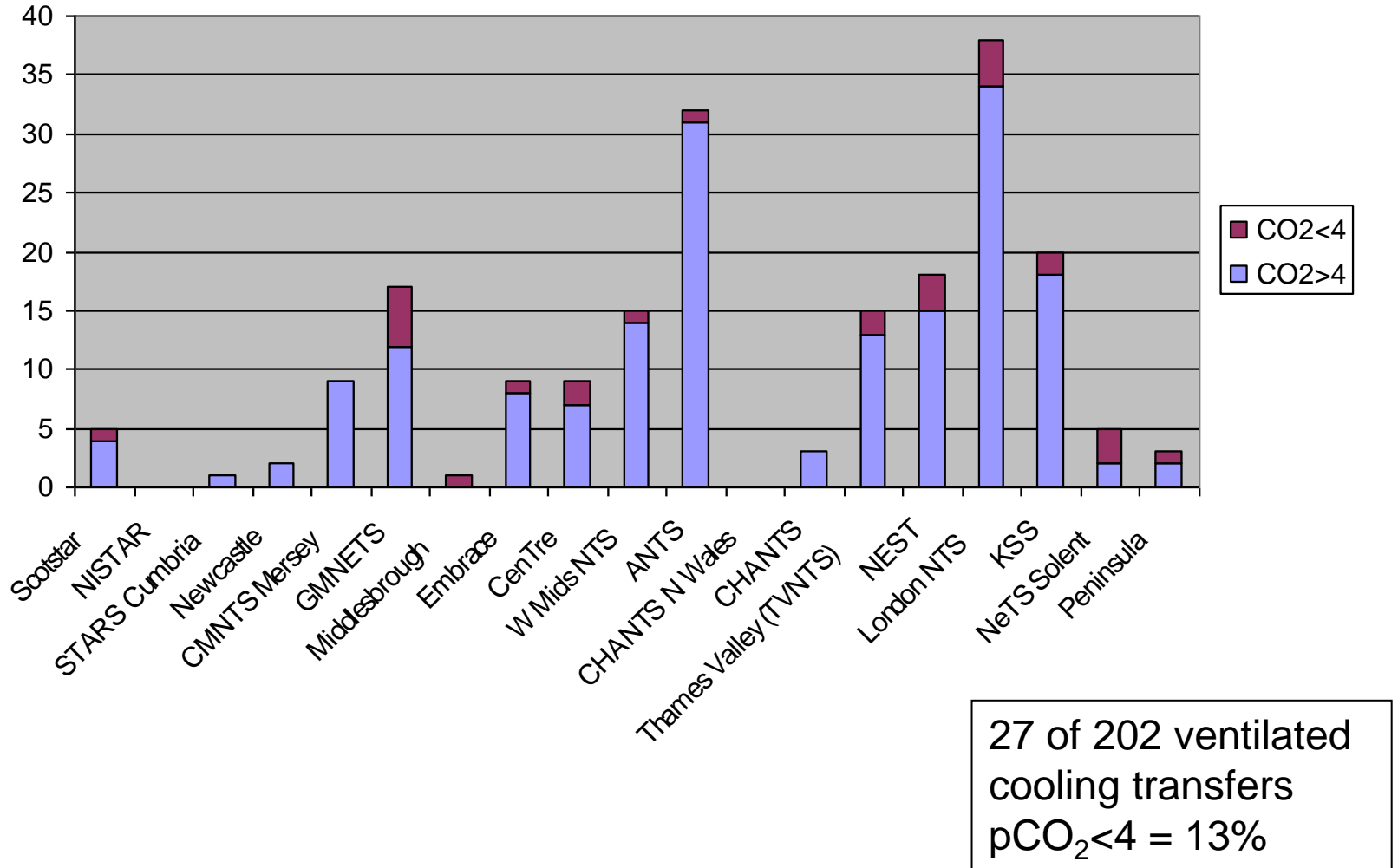
% pCO₂ >7kPa & pH<7.2 on completion ,
per service, Jan – June 2013, 2014.



Cooling, ventilated, $p\text{CO}_2 < 4\text{kPa}$ on completion of transfer



Cooling, ventilated, $p\text{CO}_2 < 4\text{kPa}$ on completion of transfer



National summary

- Work has gone up, but not evenly.
- Time critical numbers are static, but 77% mobile in 60 mins (up from 73%).
- More teams are arriving with infant within 3.5hrs for uplift: (72 – 86%).
- 91% of transfers are done by the commissioned team.
- Most cooled infants are transferred with active cooling.
- Overventilation rates improving (9% - 5%)

NTG

- Promote the quality & safety agenda.
 - Data – hypothesis generation & shared projects.
 - Research.
 - Incident sharing.
 - Promoting patient-focussed best practice.
 - Benchmarking.
- New Chair next year...