

A decorative graphic consisting of two overlapping, wavy shapes. The top shape is blue and the bottom shape is black, both curving upwards from the center to the sides.

**Creating a blood donation strategy  
to deliver step changes in  
sufficiency and productivity**

**EBA Masterclass 31<sup>st</sup> May 2013**

Amsterdam

# *Objectives of this presentation*



*Blood and Transplant*



- **Provide some examples of approach & analysis used to develop NHSBT Blood Donation strategy**
- **Share our plan to deliver a step change in productivity and some learnings from initial pilot**

# Topics to cover

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1

- Developing a demand and supply model by blood group and useful analysis to understand changes in donor base

2

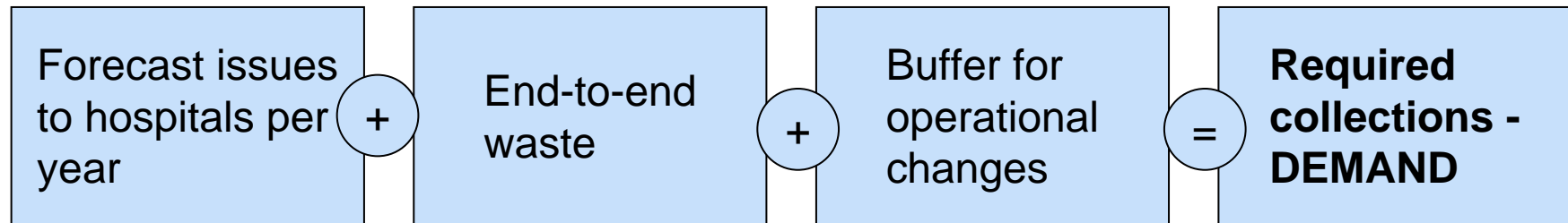
- Identifying key actions to make “big” productivity improvements

3

- Some learnings from piloting running fewer larger sessions

# 1 Demand and supply model by blood group

## 0 Neg example

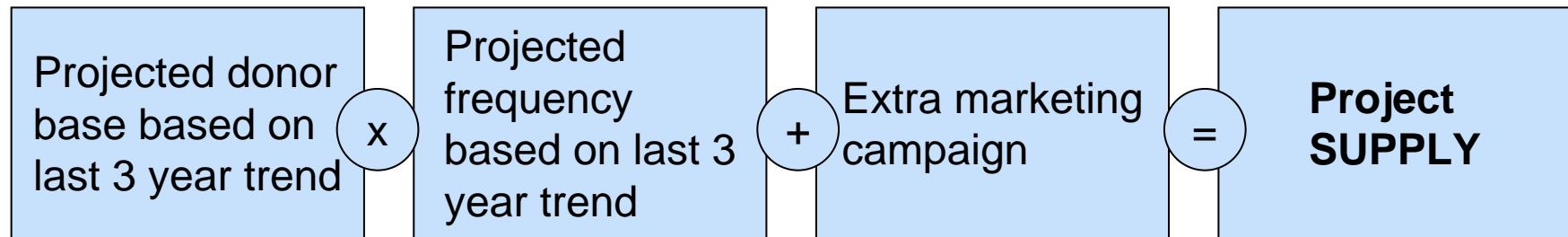


211k

9k

1k

220k



123k

1.72

2

213k

Projected based on the last 3-years historical trend; model allows to run other trends e.g. 5 last year or last year

GAP

-7K

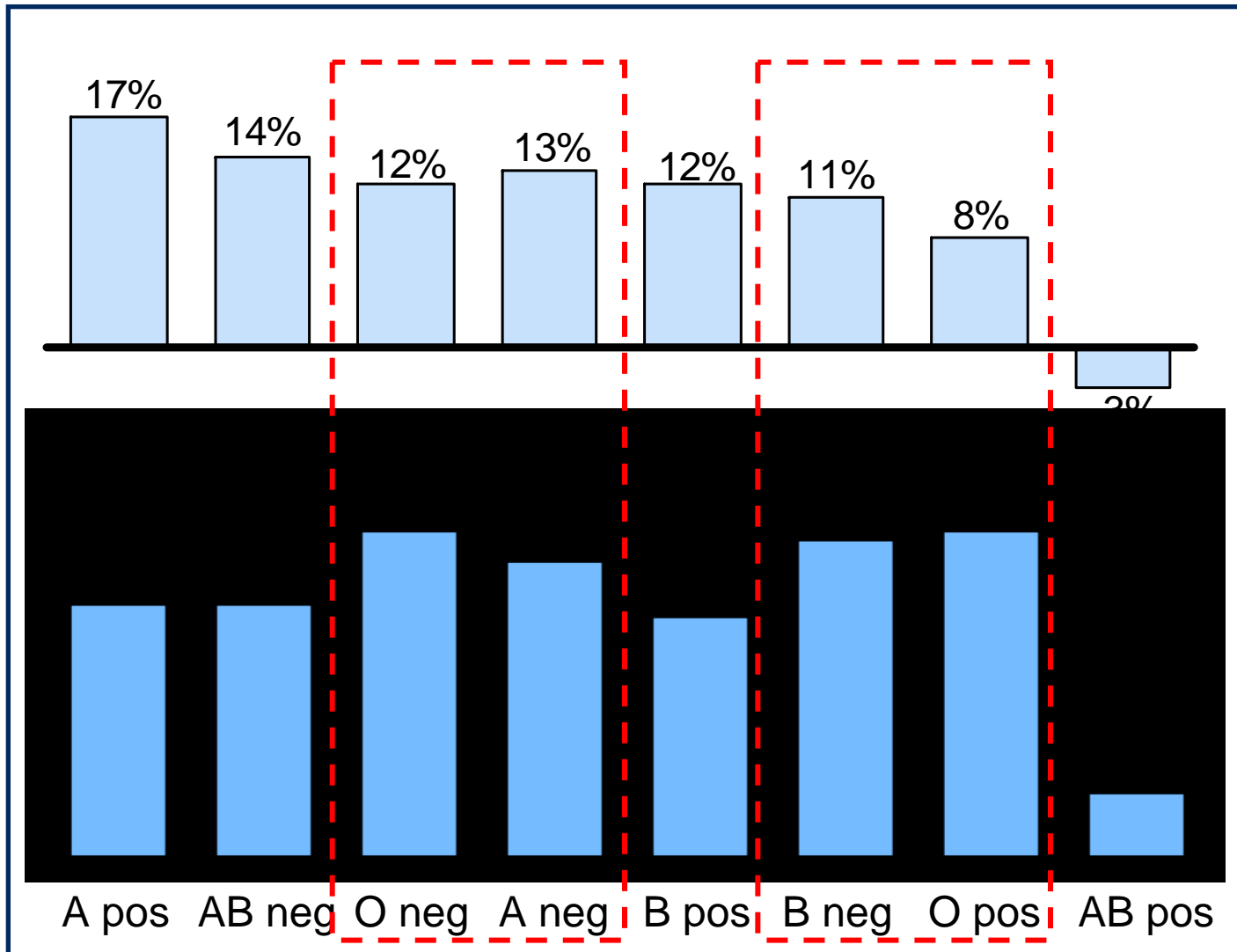
# 1 *Some blood group will be challenging in 3-5 years from now*

Difference between required collections and projected supply. '000 RBC

<u>Difference between demand and projected supply</u>	2013/14	2014/15	2015/16	2016/17	2017/18
A Neg	6	4	2	0	-3
A Pos	-6	-17	-32	-48	-65
AB Neg	0	0	0	0	-1
AB Pos	10	10	9	8	7
B Neg	1	2	2	1	1
B Pos	4	4	5	2	0
O Neg	3	0	-2	-5	-8
O Pos	23	16	4	-10	-25
<b>Total</b>	<b>42</b>	<b>20</b>	<b>-12</b>	<b>-50</b>	<b>-93</b>

- Assumes we can maintain the same rate of increase in frequency of donation as in the last 3 years
- No immediate challenge to the supply over the next 2 years
- To close the gap, we can push increased in frequency of donation further or slow down the decline in donor base

# 1 Frequency of donation will not be enough to close the gap for some blood groups



Challenging for O neg, O pos, B neg and possibly A neg:

- Historically we achieved ~8%
- Frequency above 1.75 when donor can donate only 3 or 4 times p.a.

# 1 *Segmented approach to manage our donor base by blood group*



**Securing sufficiency of supply require to manage our donor base differently by blood group**

## **O NEG**

- Need to increase our donor base by 2-4k donors by 2017-18
- Continue increasing frequency of donation

## **A POS, B NEG, A NEG, O POS**

- Slow down the current rate of decline in donor base but no need to increase the number of donors

## **REST OF BLOOD GROUPS**

- Maintain current trend in terms of donor base and frequency of donation

# 1 *Some useful analysis to understand your donor base trends*

**Minimum 3 years historical data; better 5**

## **Change in donor base and recruitment by age group**

- Lost a disproportionate number of donors <44 years old (20% decline vs. 8% overall)
- Challenge: recruitment for 17-19 and retention for ages 20-35

## **Change in donor base by geography and Mosaic segment**

- Struggling on both donor base and frequency in North East and West Midlands
- Mosaic segments largely unchanged – if any, less rural solitude and small diversity town

## **Change in number of donors by frequency of donation**

- Increased reliance on our 3 and 4 times donors; ~250k donors account for >40% of donations
- 40% of these are over 55 and tend to live away from large urban areas

## **Change in the type of attendance and marketing efforts**

- Attendances declined faster than donor base driven by our “walk-in” donors
- Response rate to invitation declining slowly

**NHS**

**Blood and Transplant**

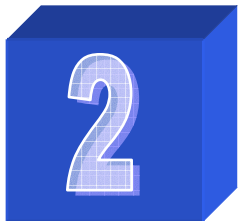


# Topics to cover

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- Developing a demand and supply model by blood group and useful analysis to understand changes in donor base



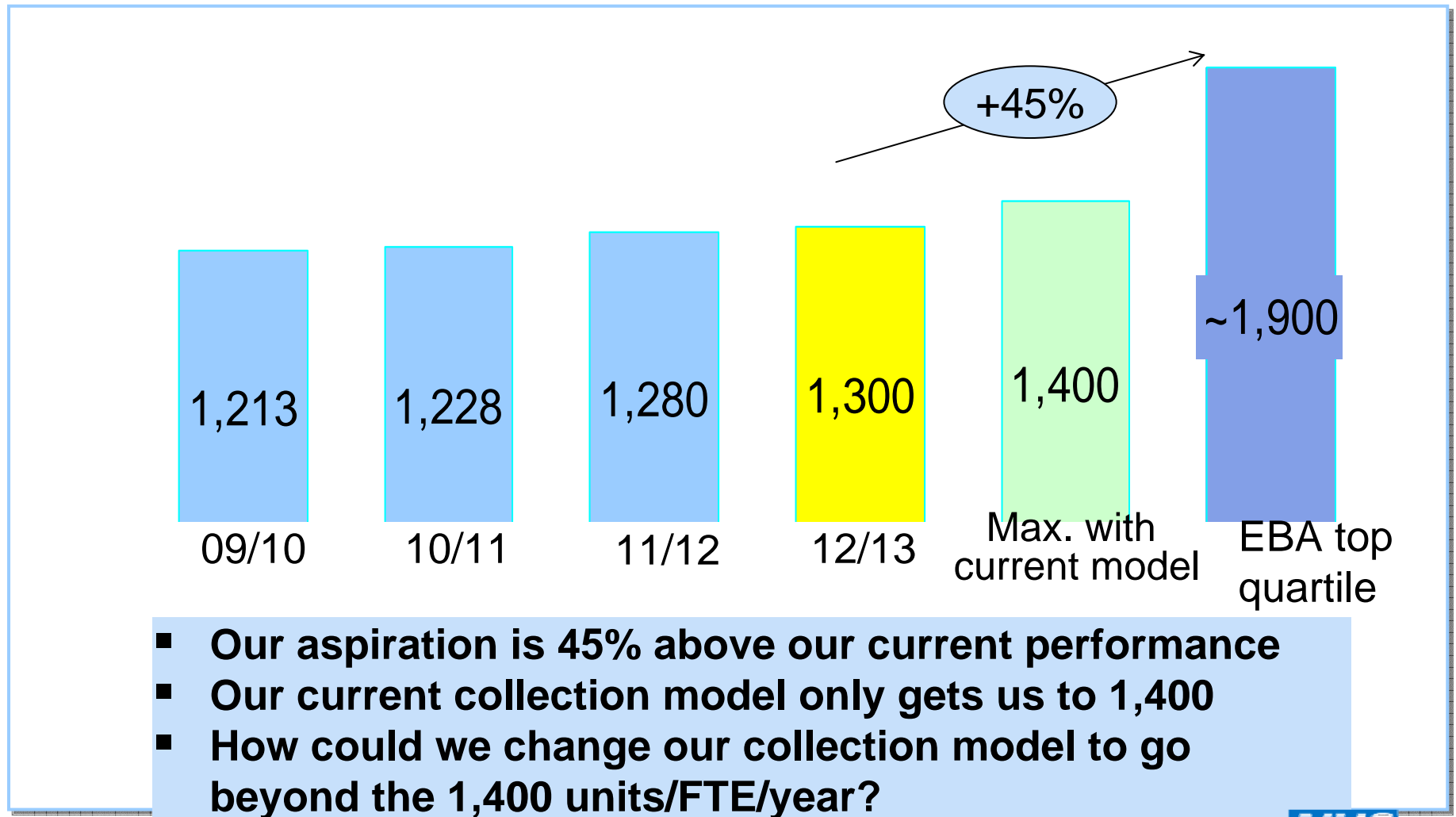
- **Identifying key actions to make “big” productivity improvements**



- Some learnings from piloting running fewer larger sessions

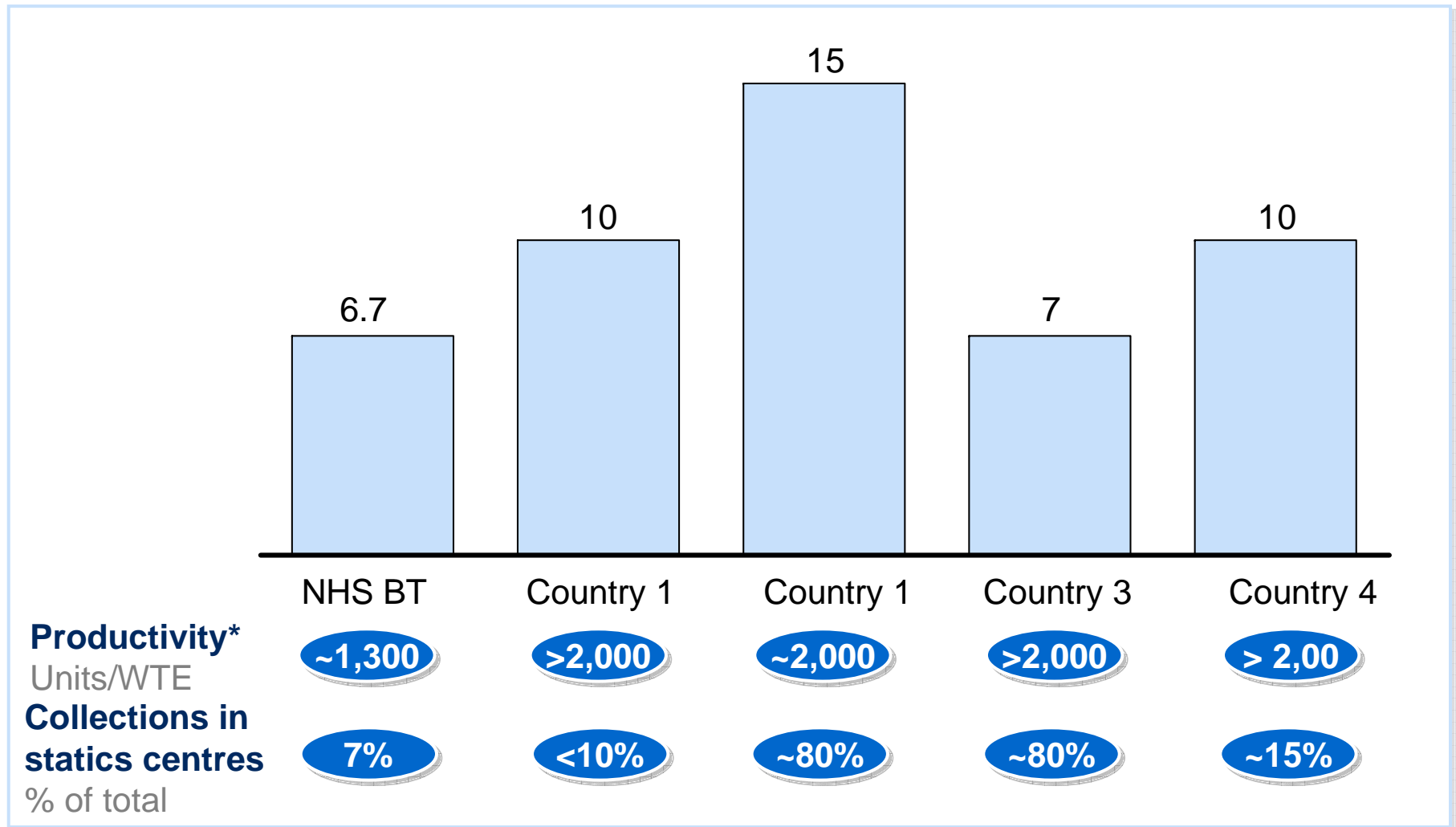
# 3 Our starting point in blood collection productivity

Blood collection productivity. Units/FTE/year.



# 3 Top performer countries in the EBA benchmark seem to collect using larger sessions and/or more in statics than NHSBT

Typical number of beds per session



\* 2011-12 data for EBA countries; YTD December 2012/13 for NHSBT  
SOURCE: EBA benchmarking workshop questionnaire 2009

# 3 Size of mobile sessions – larger sessions are more productive

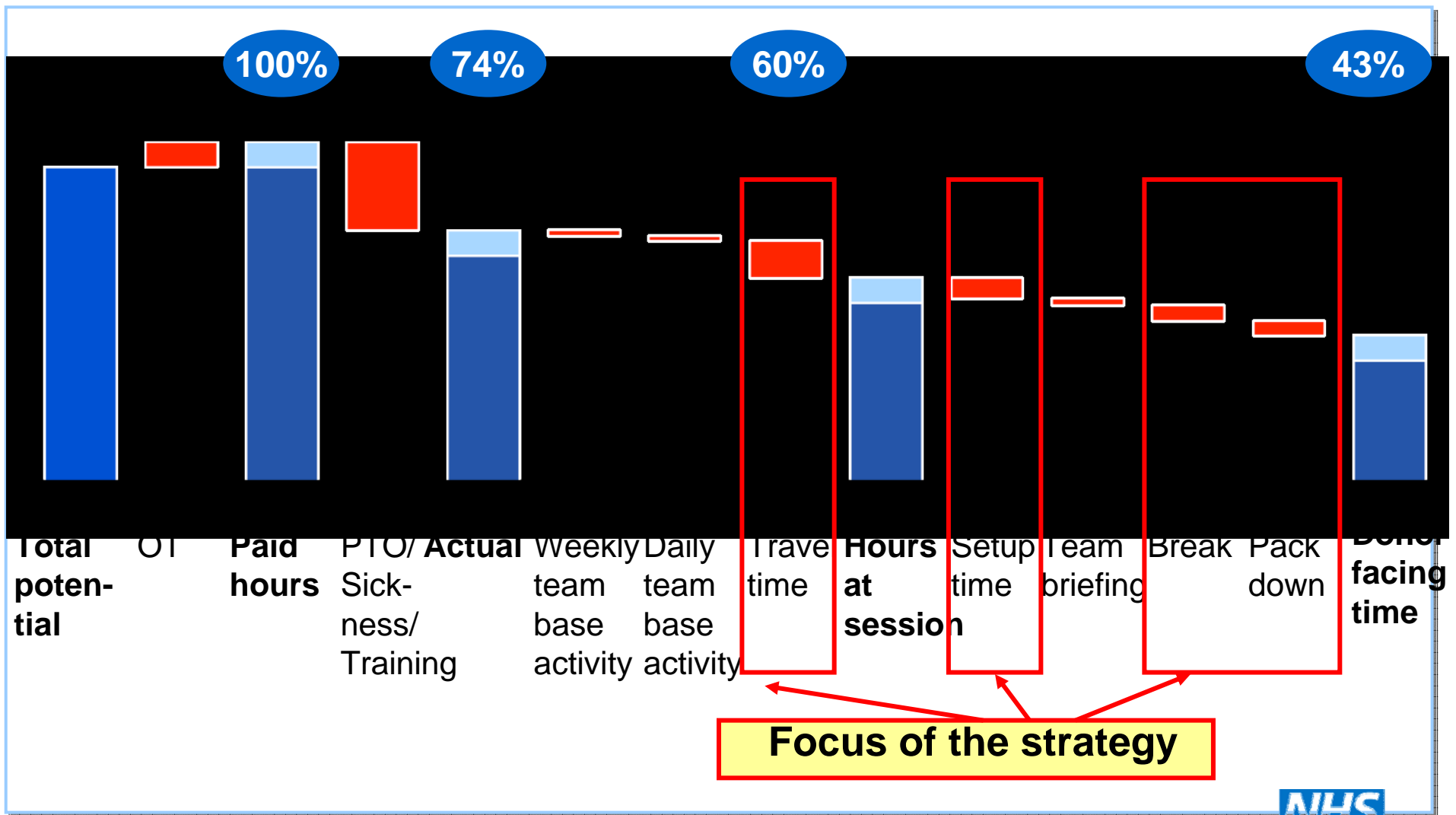


<u>Number of beds</u>	<u>Size of team</u>	<u>Units per hour</u>	
3	6	1.4	+ 25%
6	10	1.7	
9	12	2.1	+ 20%
12	16	2.1	

- When we move a session from 3-beds to 6-beds we can achieve a 25% improvement in in-session productivity and another 20% when we move from 6 to 9 beds
- Also we need fewer sessions to collect the same volume: less travel, less set up/pack down

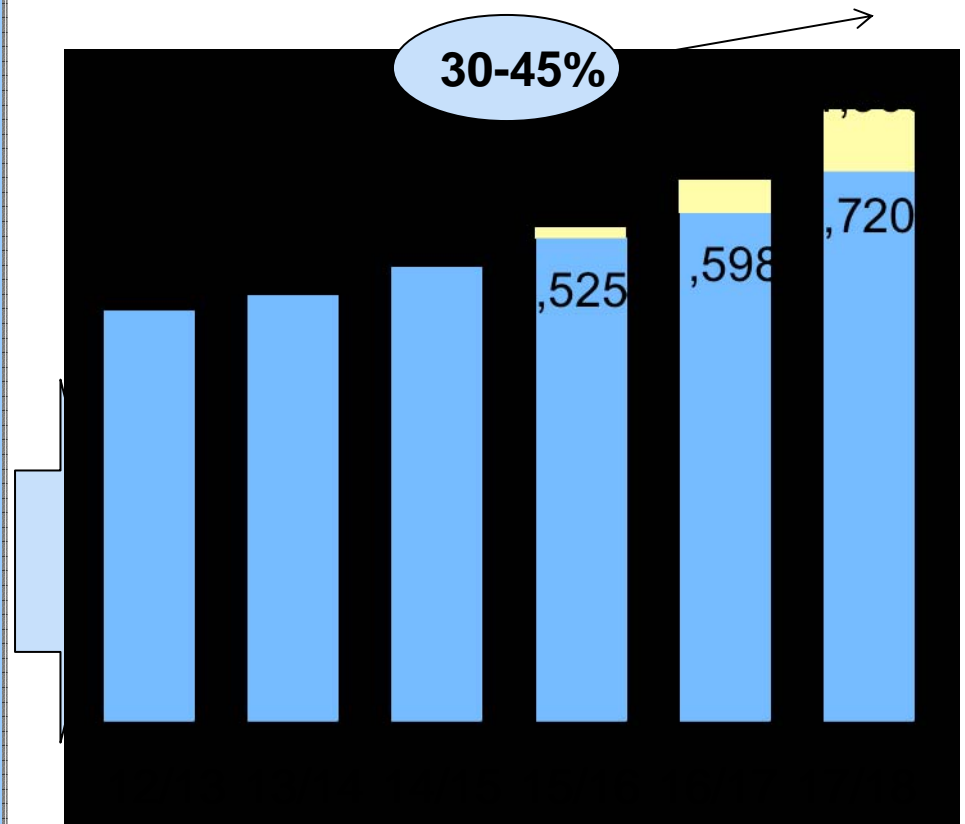
# 3 We need to reduce the non donor facing – currently 57% of our total paid time

Working hours per WTE per year, hours.



# 3 Plan to drive a “big” improvement in collection productivity

- Consolidate our small sessions into larger sessions, preferably 9-beds sessions
- Apply “lean” techniques to reduce timing of the set up and pack down process
- Run continuous sessions – no mid session breaks
- Collect more in our statics centres
- Review sessions where we travel for over 1 hour

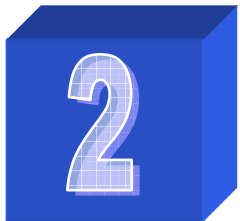


# Topics to cover

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- Developing a demand and supply model by blood group and useful analysis to understand changes in donor base



- Identifying key actions to make “big” productivity improvements



- **Some learnings from piloting running fewer larger sessions**

# 3 Pilot in Newcastle & Teesside to understand impact of moving to larger sessions

↑ Session per fortnight

-2



Bloodmobiles 1 BM decommissioned

-22



6 Pod sessions

+12 sessions



9 Pod

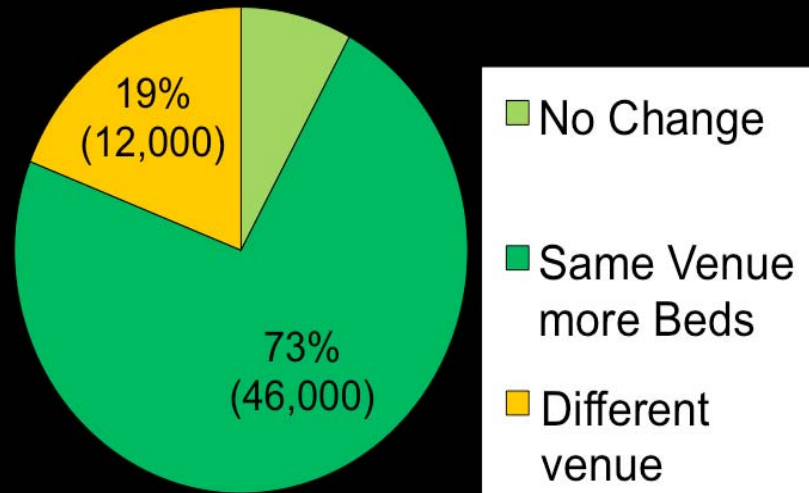
sessions



Average session size from 6.2 to 7.2 beds

Maximum distance moved 3 miles: Newcastle 70% donors less than 1 mile; in Teesside 50%

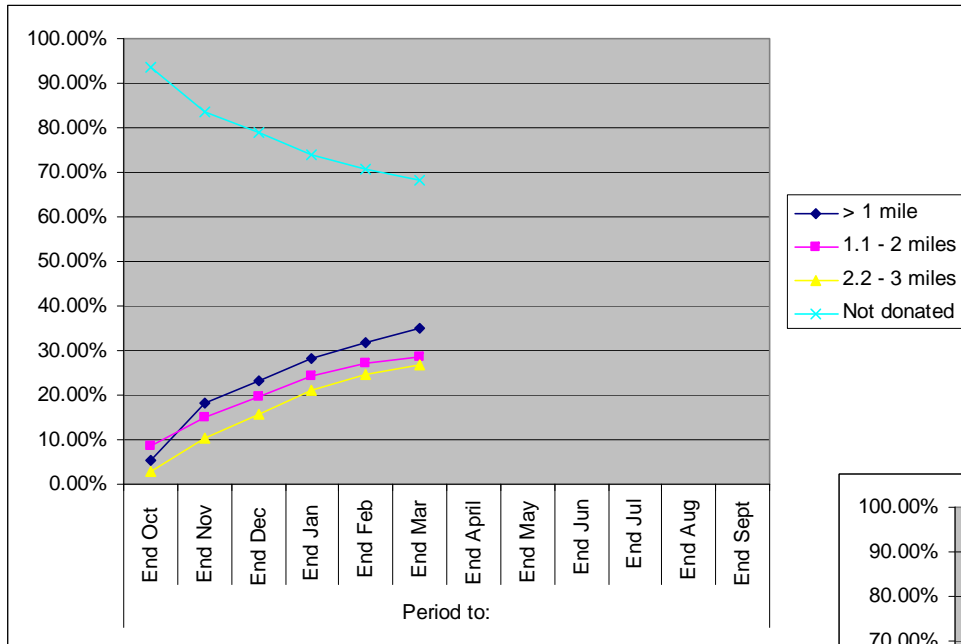
Total numbers of donors = 63k





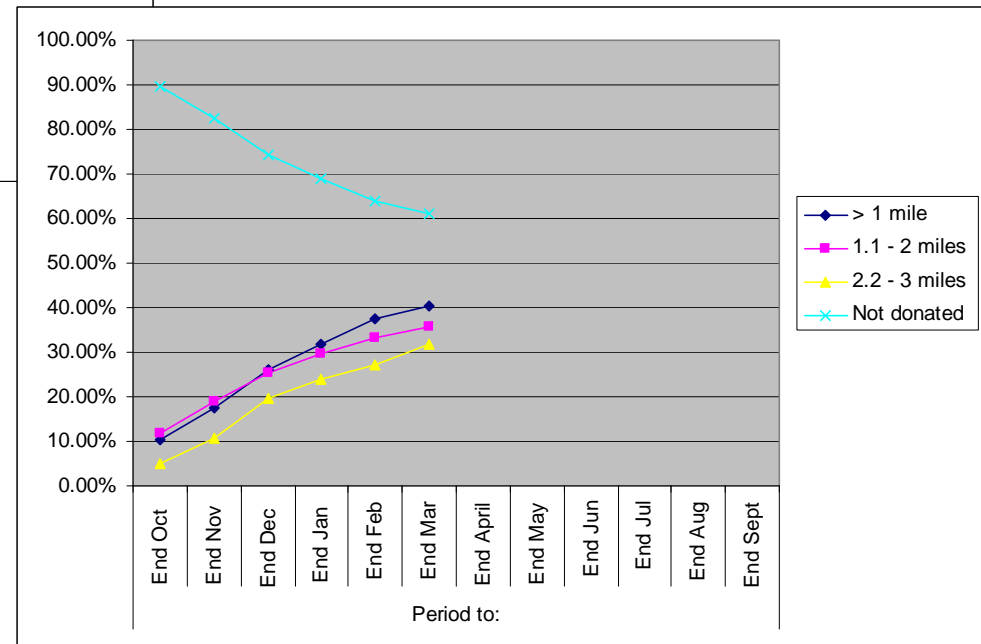
# 3 Initial data on attrition after 6-months

## Teesside



- Return rate of donors is lower the further we ask donors to donate
- Return rate in Newcastle is higher than Teesside e.g. < 1 mile is 40% vs. 35%

## Newcastle



- Total sample: 12,000 donors asked to donate in a different venue
- Extrapolated attrition: 25% in Newcastle and 35% in Teesside vs. an average pre-pilot of 20.5%

# 3 *Some other learnings from the pilot*

## Donor/ collections

- If “light approach in marketing ” used, collections would be below expected by ~10% for ~6 months
- Donors who attend the new venues, do not mind larger sessions and generally appreciate the larger better venues

## Marketing

- It will take time to come up with an effective local marketing campaign
- On-session booking support has improved attendance rates
- Same day texts have improved DNA's

## Planning

- Planners to develop new programmes jointly with operations
- Need to understand impact on rosters and staff working hours
- Avoid changing opening times as well (from evening to morning)
- Avoid changes in university sessions

## HR

- Merging teams and reviewing contracted hours complicates implementation.
- Take off staff for 1 day before launch to explain changes and train on messages to donors

## Efficiency

- Productivity to increase by 30-40% to ~1,500 units/FTE/year
- Recurring savings of £310k - payback ~2 years