

# SWICS 2019

Intraoperative Cell Salvage activity  
across the South West UK

Oliver Pietroni, RCHT. January 2022, SW PBMG meeting

# Aims

- Present overall & comparative data
- Highlight some differences - what can we learn?
  - Processing & Reinfusion rates
  - EBL vs salvaged RBCs
  - Maternal Anaemia
- Hospital Order maintained to aid interpreting graphs (same position on each graph - even though aesthetically not always pleasing!)


# 2019

## SWICS Summary

Bournemouth  
Derriford  
GWH  
NBT  
Poole  
RCHT  
Taunton  
Torbay

**5951**  
cases

**>725**  
**litres**  
salvaged



**>2400**  
re-infused

**359**  
cases  
**>450ml**  
reinfused



**41%**  
re-infused



**94%**

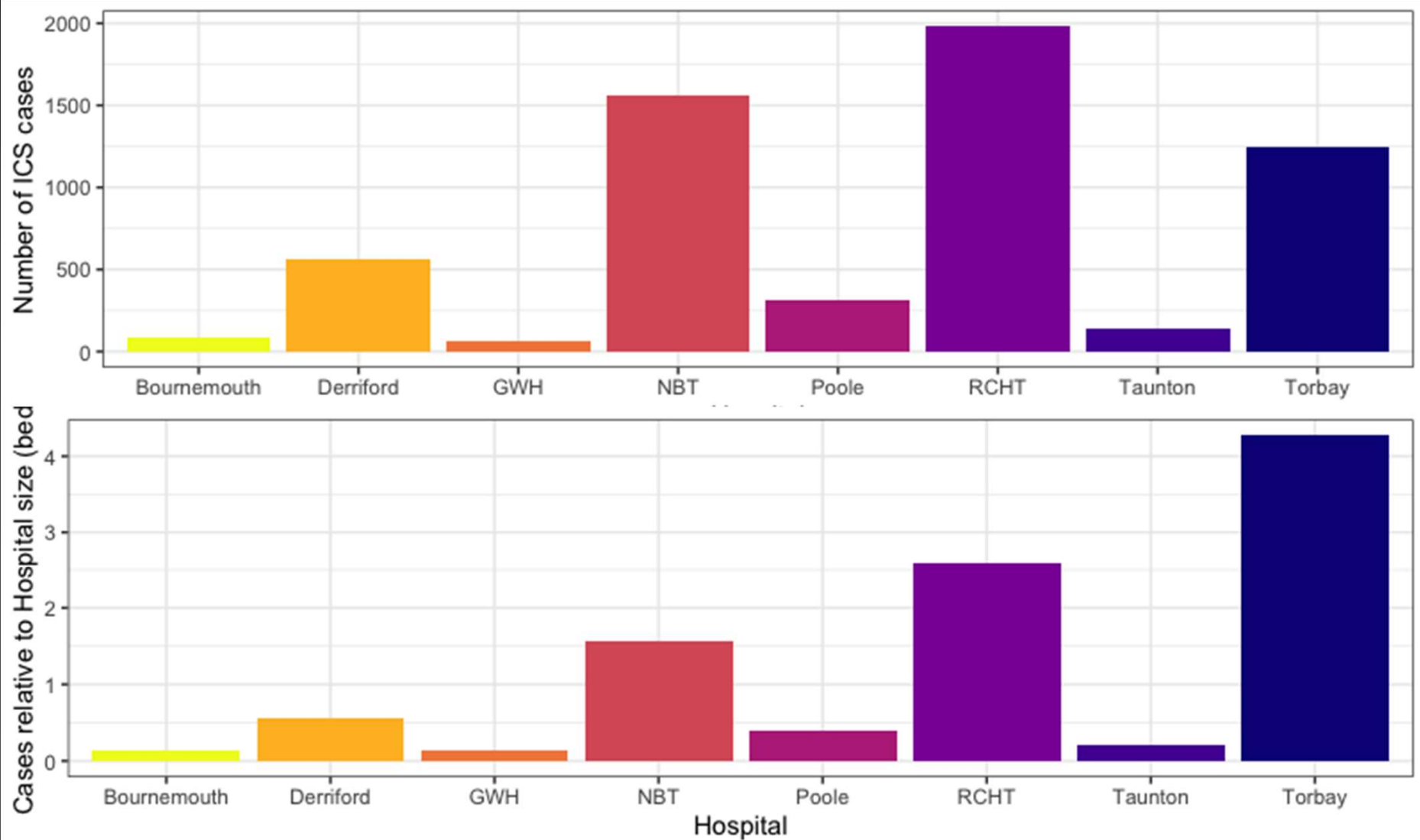


# What data?

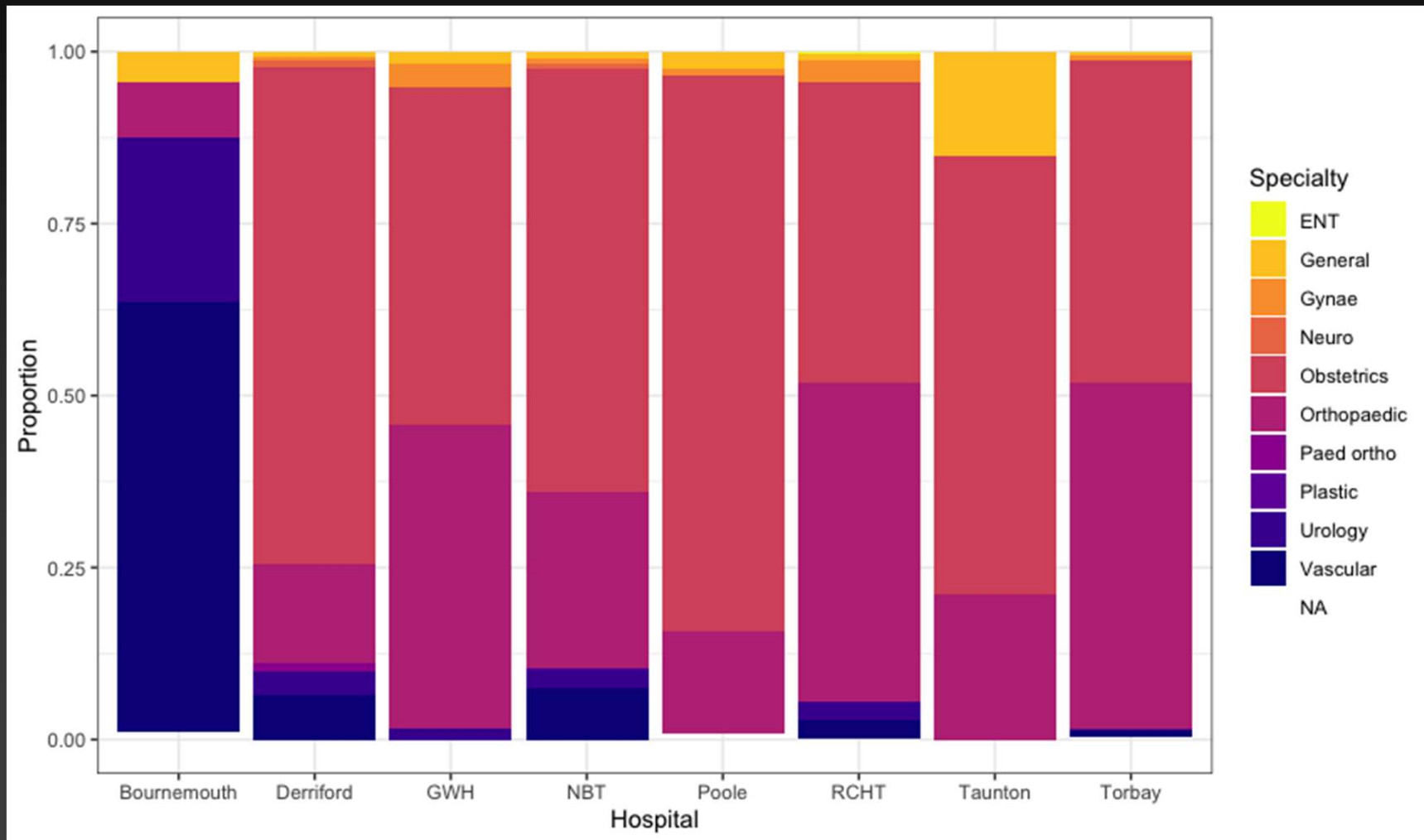
## ... and who

	Bournemouth	Derriford	GWH	NBT	Poole	RCHT	Taunton	Torbay
Date	✓	✓	✓	✓	✓	✓	✓	✓
Procedure	✓	✓	✓	✓	✓	✓	✓	✓
Specialty	✓	✓	✓	✓	✓	✓	✓	✓
Pre-op Hb	✗	✓	✓	✓	✗	✓	✓	✗
Status (Coll / Proc)	✓	✓	✓	✓	✓	✓	✓	✓
sRBC Reinfused	✓	✓	✓	✓	✓	✓	✓	✓
EBL	✓	✗	✓	✗	✗	✓	✓	✓
TXA	✗	✗	✓	✓	✓	✓	✓	✓
JW	✗	✗	✓	✓	✓	✓	✓	✗

# Distribution of ICS cases



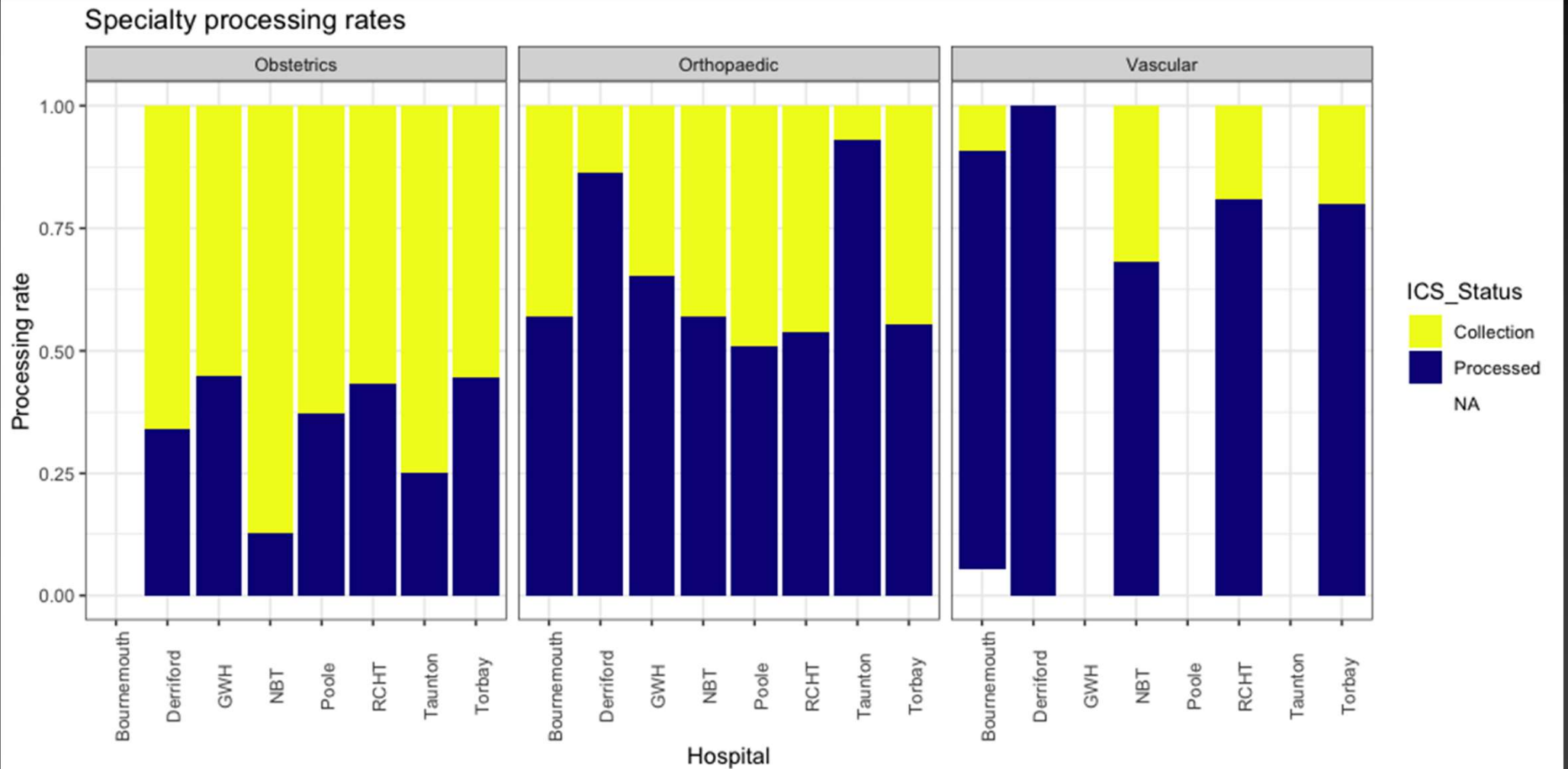
# Specialty breakdown



# Processing rates

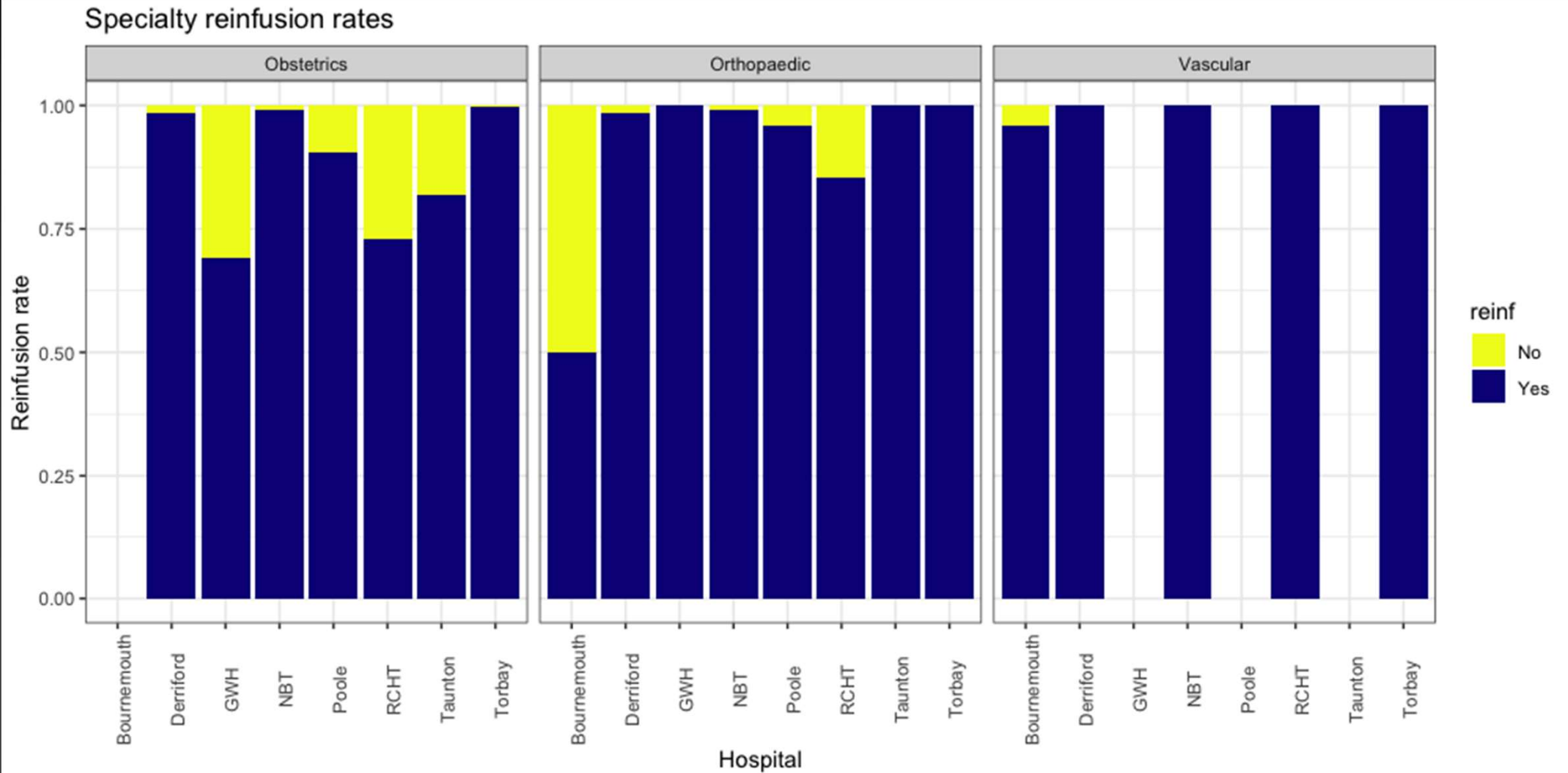
- Routine provision vs high risk cases (difficult to predict)
- Balance cost effectiveness, environmental impact & clinical benefit.
- Optimum processing rate?
- Processing for training?

# Processing rates

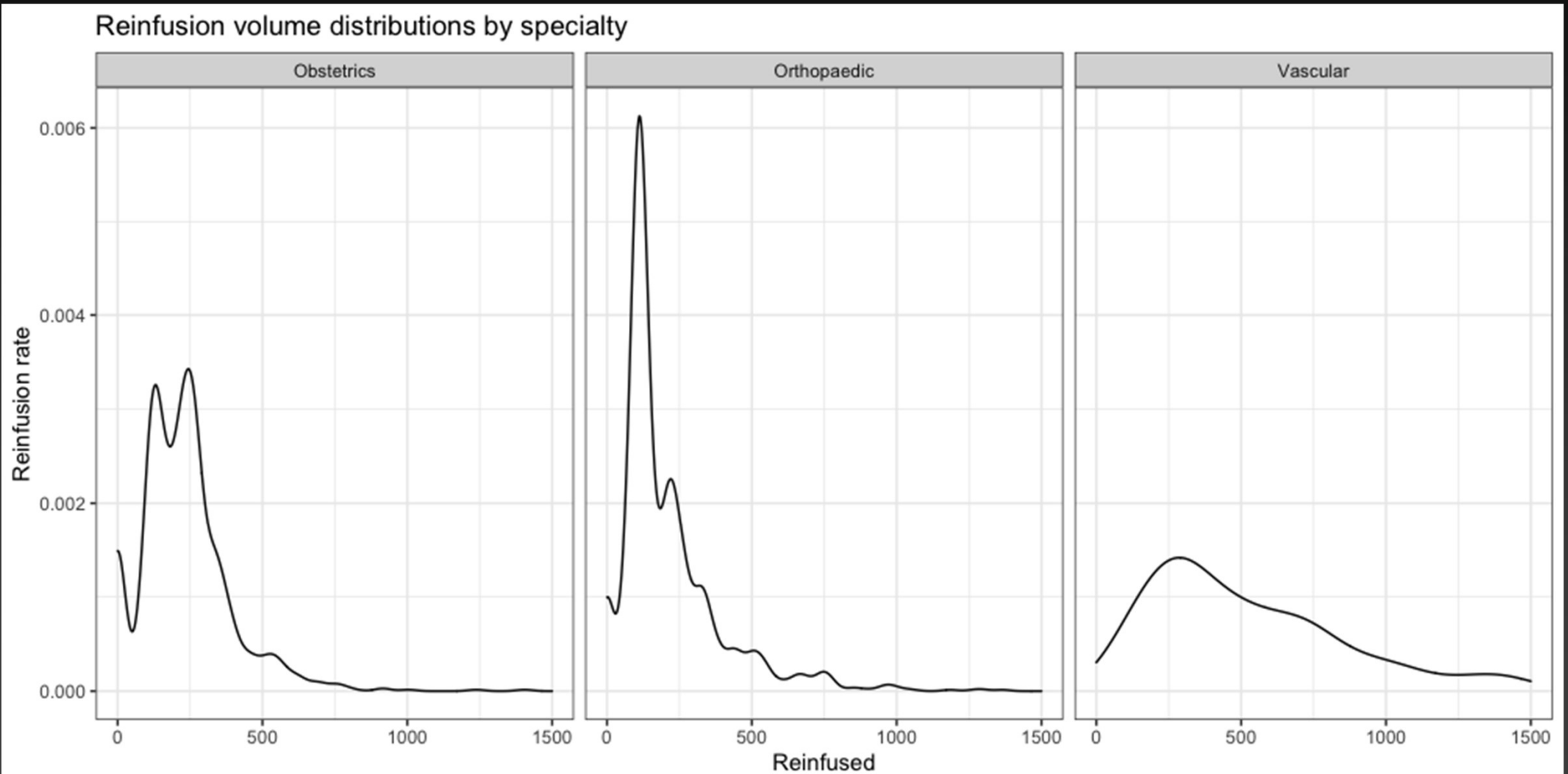




# Reinfusion rates (when processed)



# Reinfusion volumes



# Obstetric cases

Balancing benefit of processing, reinfusion & volumes

## NBT

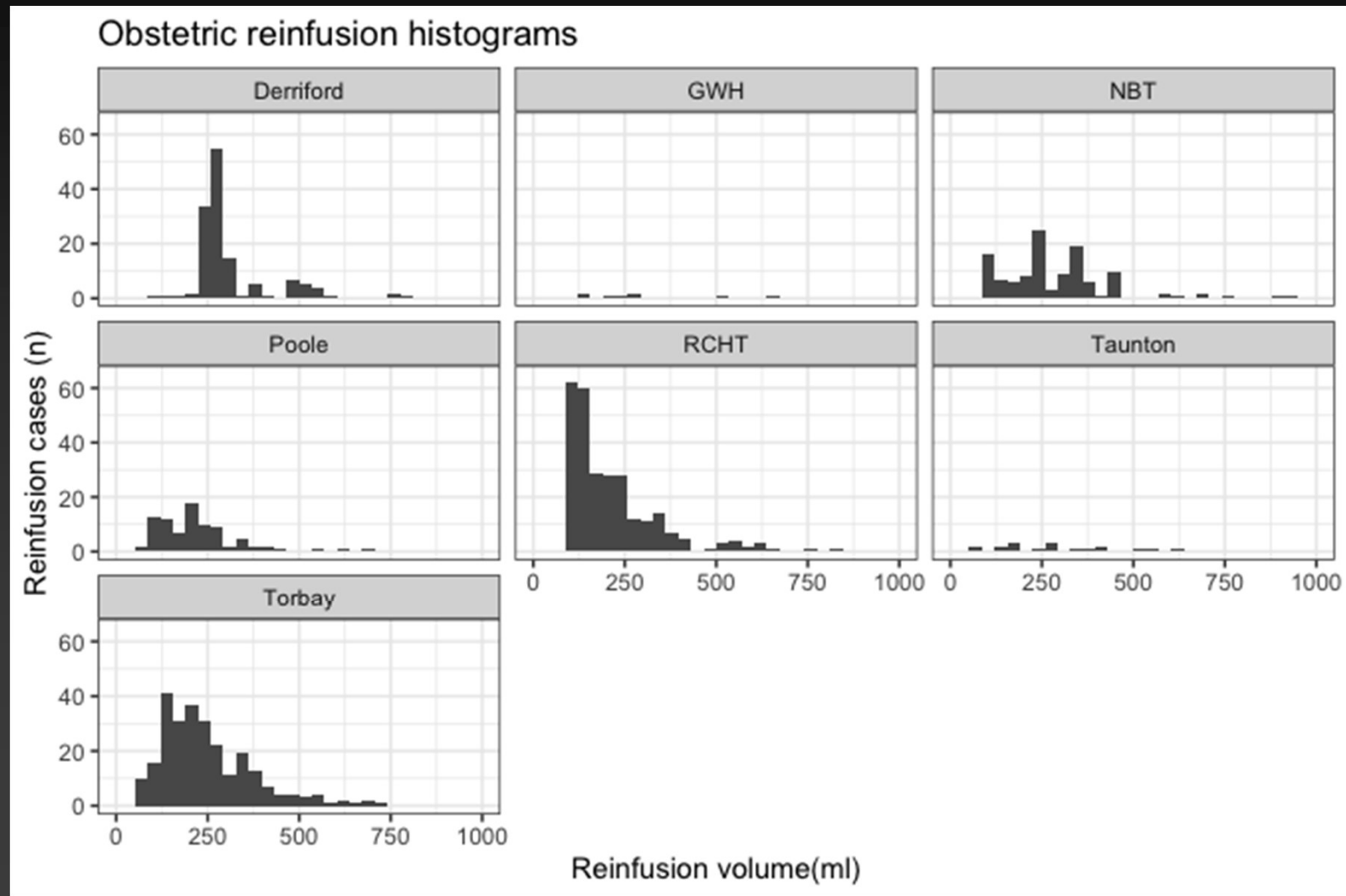
- lowest processing %
- high re-infusion %

## RCHT

- high processing %
- lower re-infusion %

	Number	Mean Vol Reinfused (ml)
GWH	9	472
NBT	121	322
Derriford	136	314
Taunton	18	289
Torbay	260	248
Poole	87	232
RCHT	272	214

# Regional Obstetric re-infusions



# Usage vs re-infusion rates

Where is the balance?

More selective  
vs  
Under-used service



More inclusive  
vs  
Clinical benefit  
Sustainability  
Cost effectiveness

It's complex!

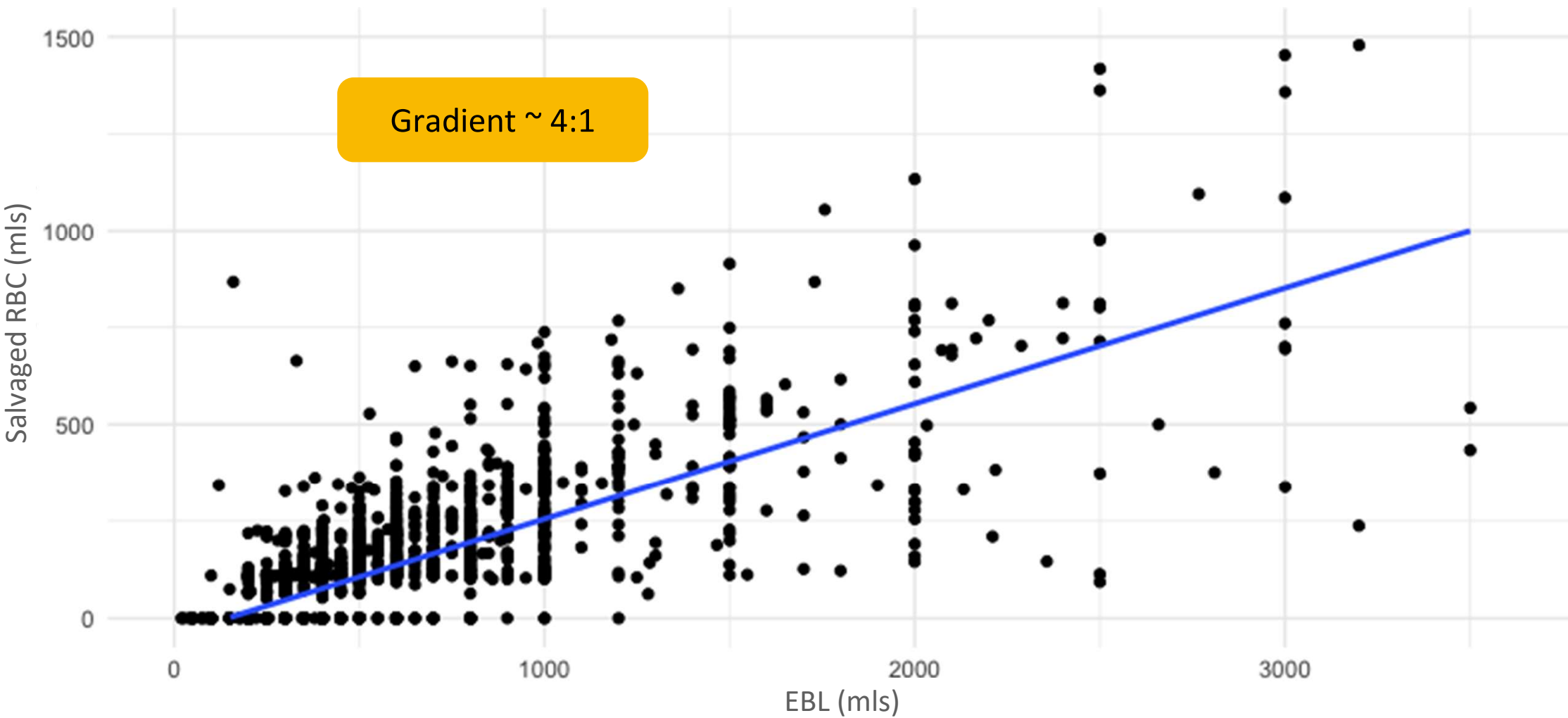
# Re-infusion data

## All Specialties

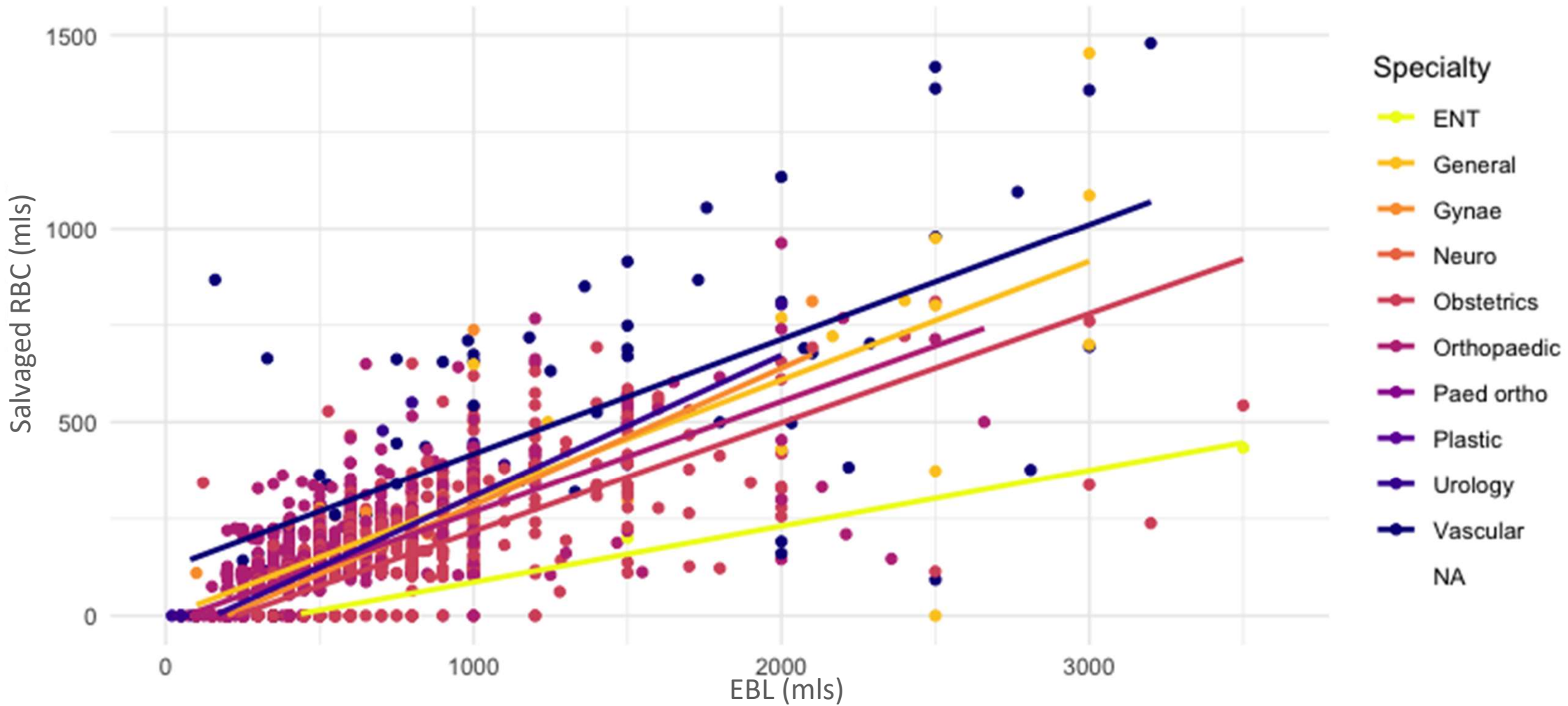
	Hosp	Operation	Vol Re-inf
1	RCHT	Spleen	5917
2	Bournemouth	AAA	3868
3	Derriford	AAA	3660
4	RCHT	AAA	2905
5	GWH	rTHR	2829

- Range: 43 - 5917 ml
- Total: 725,267 mls (~3,500 units RBCs)
- 41% reinfusion rate
- 2435 Patients
- 5 JW patients (233 - 540ml)
- 359 patients >450ml
  - 1 per day
- 1795 patients >125mls (30%)

# EBL vs Salvaged RBC



# EBL vs Salvaged RBC



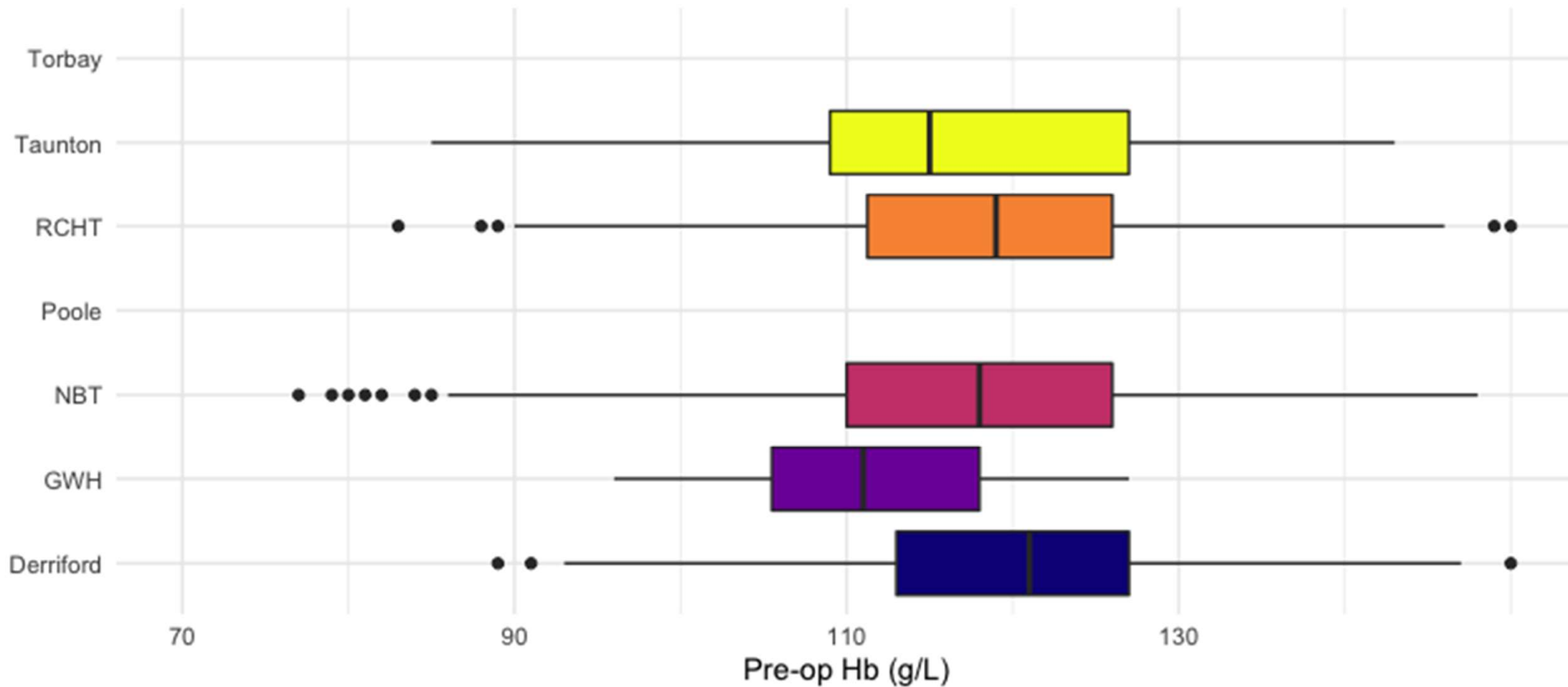


# Comparative Maternal Anaemia

- All Obs cases (not just CS)
  - Em / El
  - Only with ICS used
- 
- Selective Obstetric users may treat anaemia as risk factor & Is ICS used more when patients anaemic as indication of high risk??

# Comparative Maternal Anaemia

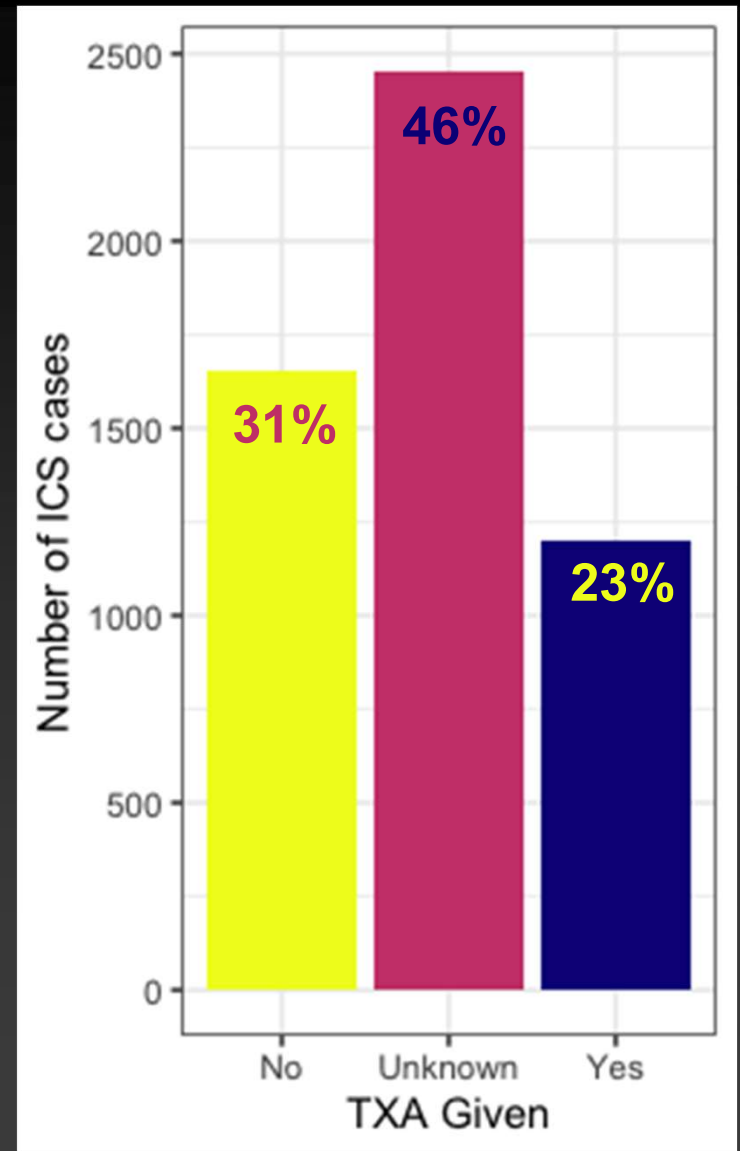
Obstetric ICS cases 2019



# TXA

Food for thought

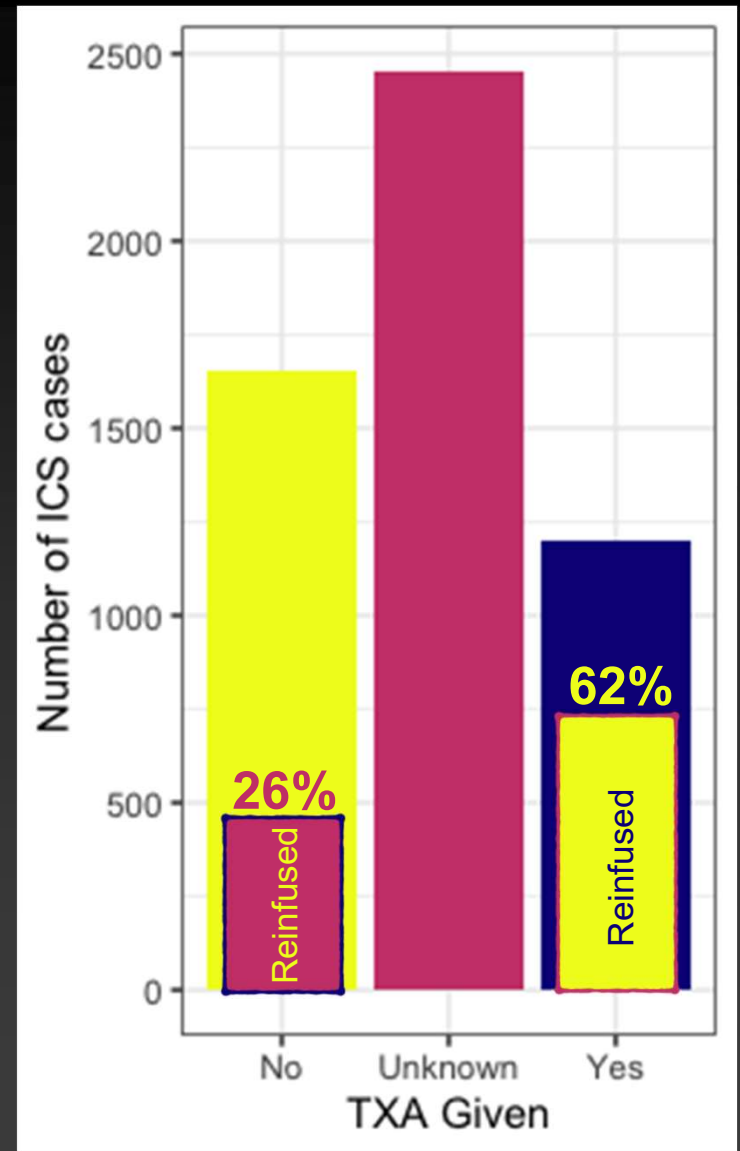
- NICE
- PBM Indicator for RTC & NCA
- Most (6/8) recorded its use (5302 cases)
- TXA is given less often then not...



# TXA

Food for thought

- NICE
- PBM Indicator for RTC & NCA
- Most (6/8) recorded its use (5302 cases)
- TXA is given less often than not...



# Conclusions

- Strong & collaborative approach to ICS in the SouthWest region
- Differences in our practice
- Similarities in our data
- Distribution of pre-op Maternal Hb appears similar across SW
- We probably don't give enough TXA (?)
- Need good quality data


# 2019

## SWICS Summary

Bournemouth  
Derriford  
GWH  
NBT  
Poole  
RCHT  
Taunton  
Torbay

**5951**  
cases

**>725**  
**litres**  
salvaged



**>2400**  
re-infused

**359**  
cases  
**>450ml**  
reinfused



**41%**  
re-infused



**94%**

