



OBSCYMRU

Obstetric Bleeding Strategy for Wales

A North Wales Perspective

Dr Kevin Kelly
Welsh Clinical Leadership Training Fellow
& Anaesthetic Registrar

12th September 2018





Outline

- Scale of the problem
- Progress of the project
- What was my role
- Facilitating change
- Evolving leadership skills
- Outcomes
- Making an impact

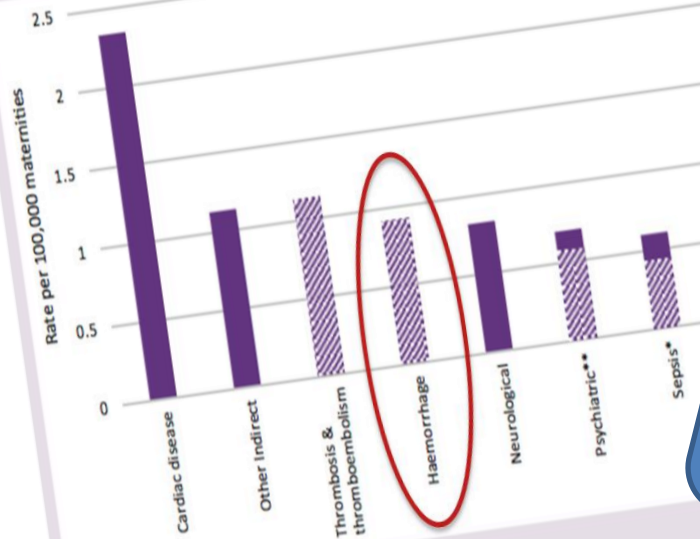
PROBLEM



Impact of Postpartum Haemorrhage

MBRRACE-UK Saving Lives, Improving Mothers' Care. Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Perinatal Deaths and Morbidity 2013–15. December 2017

Figure 2.3: Maternal mortality by cause 2013–15



'MOH remains the most frequent cause of severe maternal morbidity, being responsible for 80% of cases'

Scottish Confidential Audit of Severe Maternal Morbidity. 10th Annual Report. [Edinburgh]: Healthcare Improvement Scotland; 2014.



OBSCYMRU
Obstetric Bleeding Strategy for Wales

“Working together to reduce harm from postpartum haemorrhage”

National Quality Improvement Programme

Collaborative

Multidisciplinary

Founded on Research and Audit

Multiple Funding Streams



Ambition

3 year programme

Reduce haemorrhage related
maternal morbidity by April 2019



Blood loss
 $\geq 2500\text{ml}$



RBC and FFP
Transfusion



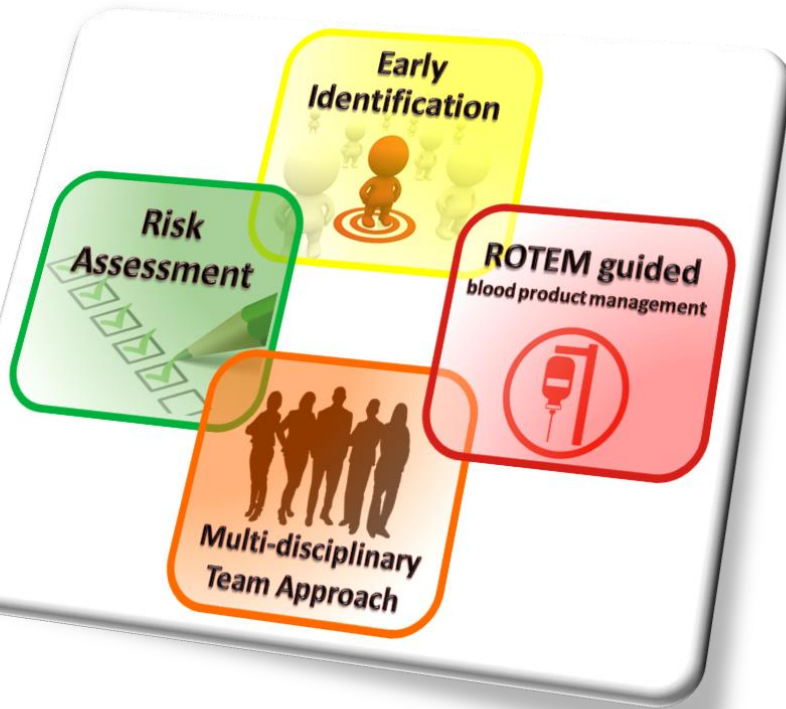
Critical Care
Admissions



Hysterectomies



Deliverables: 4 Pillars of OBS Cymru



- Universal **Risk Assessment**.
- **Early Identification** through measurement of blood loss.
- **Prompt intervention and effective team working** with senior MDT involvement.
- Patient specific **blood product usage** with ROTEM.



Deliverables: 4 Pillars of OBS Cymru

• Universal **Risk Assessment**

The 4 principles of prudent healthcare

Public and professionals are **EQUAL PARTNERS** through **CO-PRODUCTION**

CARE FOR those with the greatest health need **FIRST**

Do only **WHAT IS NEEDED** and do **NO HARM**

Reduce **INAPPROPRIATE VARIATION** through **EVIDENCE-BASED** approaches

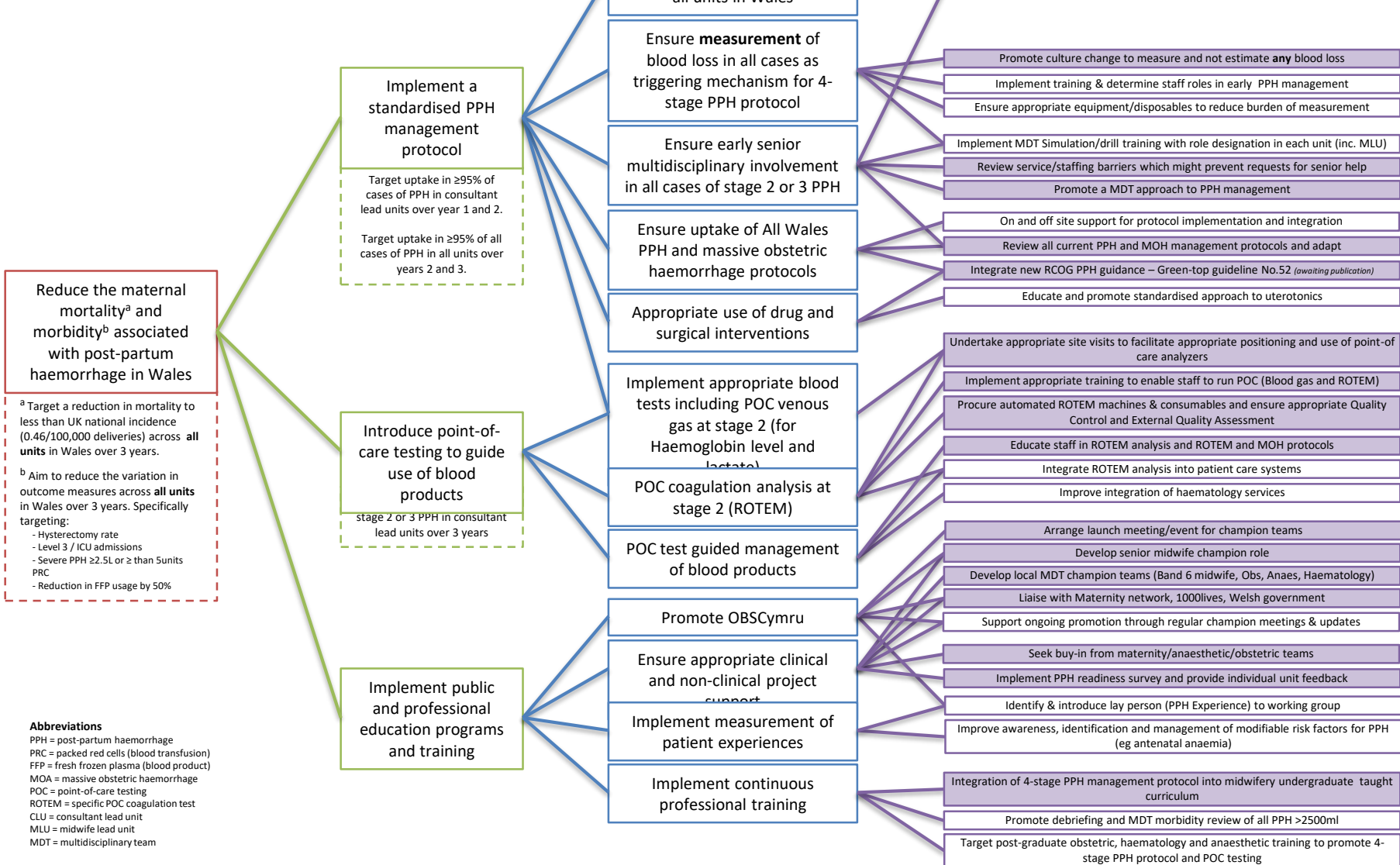
For further information visit www.prudenthealthcare.org.uk

- Patient specific **blood product usage** with ROTEM.

OBSCymru – Improving PPH care

Project Driver Diagram

July 2017 Version 1.1



Abbreviations

PPH = post-partum haemorrhage
 PRC = packed red cells (blood transfusion)
 FFP = fresh frozen plasma (blood product)
 MOA = massive obstetric haemorrhage
 POC = point-of-care testing
 ROTEM = specific POC coagulation test
 CLU = consultant lead unit
 MLU = midwife lead unit
 MDT = multidisciplinary team

Aim

Primary Drivers

Secondary Drivers

Implementation measures





OBSCYMRU

Obstetric Bleeding Strategy for Wales

Betsi Cadwaladr University Health Board





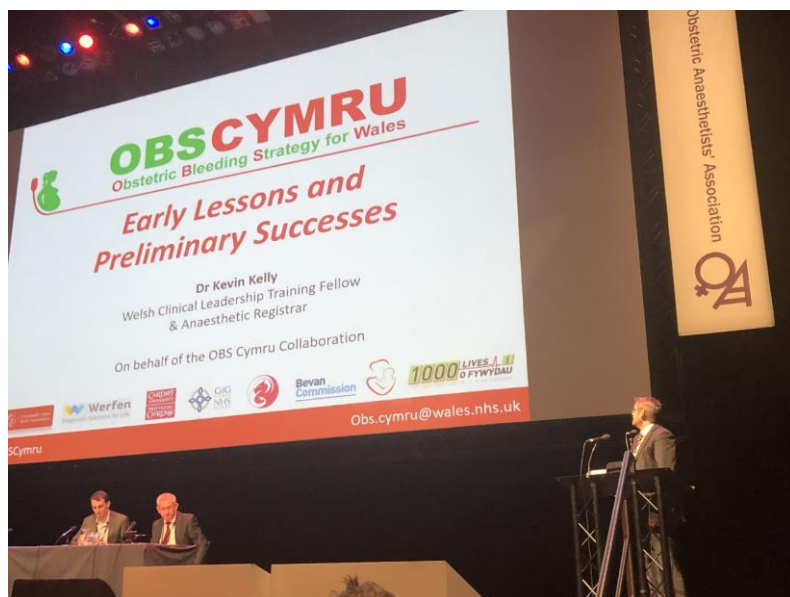
What is my Leadership Role?

Local

- Team manager for Betsi Cadwaladr health board network of local MDT champions
- Training and education of wider MDT
- Embed the process
- Conduit for concerns and idea back to the national team.

National

- Member of national project team.
- Member of national board.
- Lead on retrospective database.
- Submission of awards.
- Represent OBS Cymru at national events.





Strategic Planning

- Develop and build on key relationships
- Address the 'problem'
- Succession planning
- Clinical governance OBS Cymru simulation session



Facilitating Change

- Change models
- Working in the cloud
- Speaking to the 'tribes'
- Health board labour ward forums
- Clinical governance
- PROMPT Wales



Deliverables: Local Implementation

OBSCYMRU 1000 LIVES 1000 O FYWYDAU
Postpartum Haemorrhage Management Checklist
 Designed to be used in maternity settings. This is not a comprehensive guideline but a checklist to facilitate an appropriately escalating multidisciplinary team approach to postpartum haemorrhage and as an aid to documentation.

Patient addressograph

Stage 0	Stage 1																																		
PPH Risk Assessment Complete for all women on admission (including LSCS)	>500ml ongoing blood loss SVD & Instrumental deliveries																																		
Most recent hb = _____ Plt = _____ Result Date: ____/____/____ PPH Risk Assessment Tick if applicable Antenatal - "Increased risk" if any of the following are met: - Anaemia or bleeding disorder (Hb <105, Plt <100) - BMI <18 or >35 or Booking Weight >155kg If new weight/BMI >40 you need to calculate the circulating blood volume - 3+ previous vaginal births - Previous uterine surgery - Previous Postpartum Haemorrhage >5L - Multiple pregnancy or estimated fetal weight >4.5kg - Abnormal placental implantation - Polyhydramnios - Known Abruptio or Antepartum Haemorrhage Please make an on-going assessment of the following risk factors throughout labour and delivery Peripartum - "Increased risk" if any of the following are met: - Suspicion of chorioamnionitis / Sepsis - Labour augmented with syntocinon - Prolonged labour - Instrumental delivery - Retained products of conception Plan to measure & record all blood loss (For post deliveries estimation may be required) Act If woman at increased risk is: - She suitable for E1 blood or 2 units Xmatch? Yes / No - IV access required? (at least 16 Gauge) Yes / No Treat Planned an active 3rd stage management? Yes / No Completed by: _____ (Please print) Date: _____ Time: _____ Location: _____	Get Help Notify midwife in charge Name: _____ Request HCA to assist with measurement Other staff present <table border="1"> <thead> <tr> <th>Designation</th> <th>Time Arrived</th> <th>Time Departed</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> Act Measure Blood Loss (Estimate measurement) Record observations on MBL every 10 min IV access at least 16 Gauge What is the cause of bleeding? Tone, Trauma, Tissue, Thrombin (please circle cause(s)) Treat <table border="1"> <thead> <tr> <th>Intervention</th> <th>Performed by</th> <th>Time</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>Uterine massage</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Give uterotonics (see protocol page 4 & 5 where)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Inspect genital tract</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Empty bladder</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Check placenta & membranes</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bimanual compression</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> If bleeding stopped: - Please record MBL here _____ ml Completed by: _____ (Please print) Date: _____ Time: _____ Location: _____	Designation	Time Arrived	Time Departed				Intervention	Performed by	Time	Notes	Uterine massage				Give uterotonics (see protocol page 4 & 5 where)				Inspect genital tract				Empty bladder				Check placenta & membranes				Bimanual compression			
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Deliverables: National PPH Database

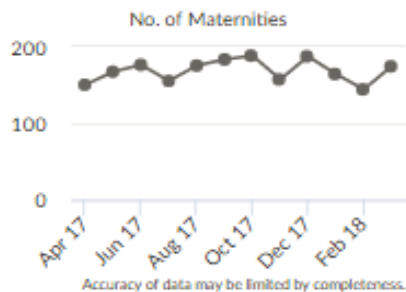
Individual-level data

Enter information on the management and outcomes of episodes meeting any of the following criteria:

- ≥ 1000 mL of blood lost
- Any blood products given (within 1 week of delivery)
- Any ROTEM was performed
- Woman transferred to ITU
- Woman underwent a hysterectomy
- Woman died

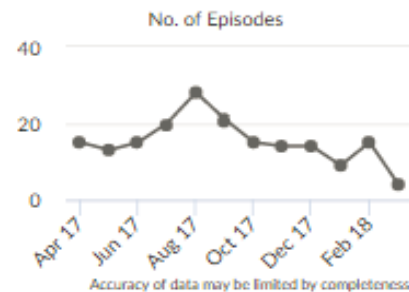
Monthly statistics

Enter monthly numbers of maternities and deliveries.



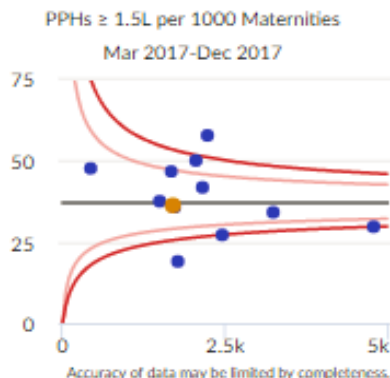
Run Charts

View monthly charts of the data, including process and outcome measures.



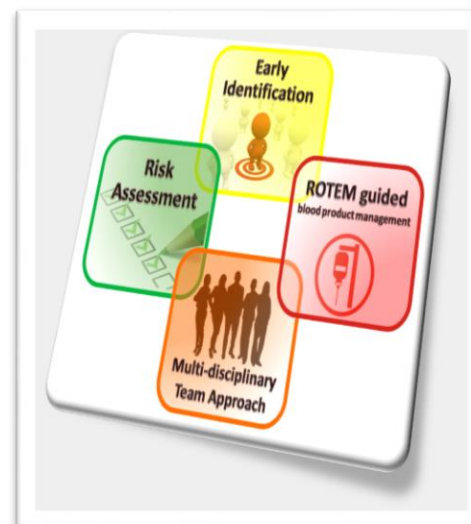
Funnel Plots

View variation across Wales.



Download data

Download Individual-level data in Excel format, including ROTEM, blood gas and lab test results.





Evolving of Leadership

- I'm a special kind of Whiskey.
- I'm not just a team player, I'm a Belbin team player.
- Learning to talk to the Gods.
- Changing hats.
- Off the 'pace'.

What's your type tipples?

ISTJ 15-year-old malt whiskey Dependable, planned, patient, builds on a foundation of experience 	ISFJ A nice cup of tea Considerate, traditional, practical and sensitive to the needs of others 	INFJ Refreshing glass of mineral water Clear insights into others; sees through to core values 	INTJ Irish coffee Calm on the surface; best ideas are under the surface; structured 
ISTP Versatile vodka Adaptable, efficient, pragmatic; thrives on variety; works well with few rules 	ISFP Warming mug of cocoa Gentle, warm and comforting, dislikes conflict 	INFP Cleansing cup of green tea Clear inner values involving human growth; idealistic, congruent catalyst 	INTP Martini Rarely shaken or stirred; contained; elegant clarity of thought 
ESTP Energy drink Stimulating; immediately impactful; lives in the moment, spontaneous 	ESFP Punch for parties Lives life exuberantly; gregarious, entertaining, friendly; adapts readily to new environments 	ENFP Cocktails Imaginative, fun; enjoys novelty, change and sharing; relies on ability to improvise 	ENTP Flaming sambuca shots Adventurous, enjoys a challenge; likes to be trail blazing and different 
ESTJ Pint of real ale Straightforward, reliable, no nonsense; focuses on bottom-line results 	ESFJ Homemade lemonade to share Cares for others in practical ways; creates a community; works to create harmony 	ENFJ Celebratory glass of champagne Gracious, congenial; attuned to emotions; celebrates success 	ENTJ Glass of vintage wine Enjoys complexity, competence and status; plans for the long term 

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OUTCOMES



Embedding Measuring Blood Loss



- Measuring blood loss communication board in the theatre.

- Cumulative blood loss measurement to assist appropriate escalation.

MEASURED BLOOD LOSS (MBL) FOR ALL CASES	
Estimated Amniotic Fluid	400 Mls
Time	Running Total MBL
Suction 12.03	640
Suction 12.10	840
Suction 12.26	1214
12.50	1660
13.20	2813
	Total



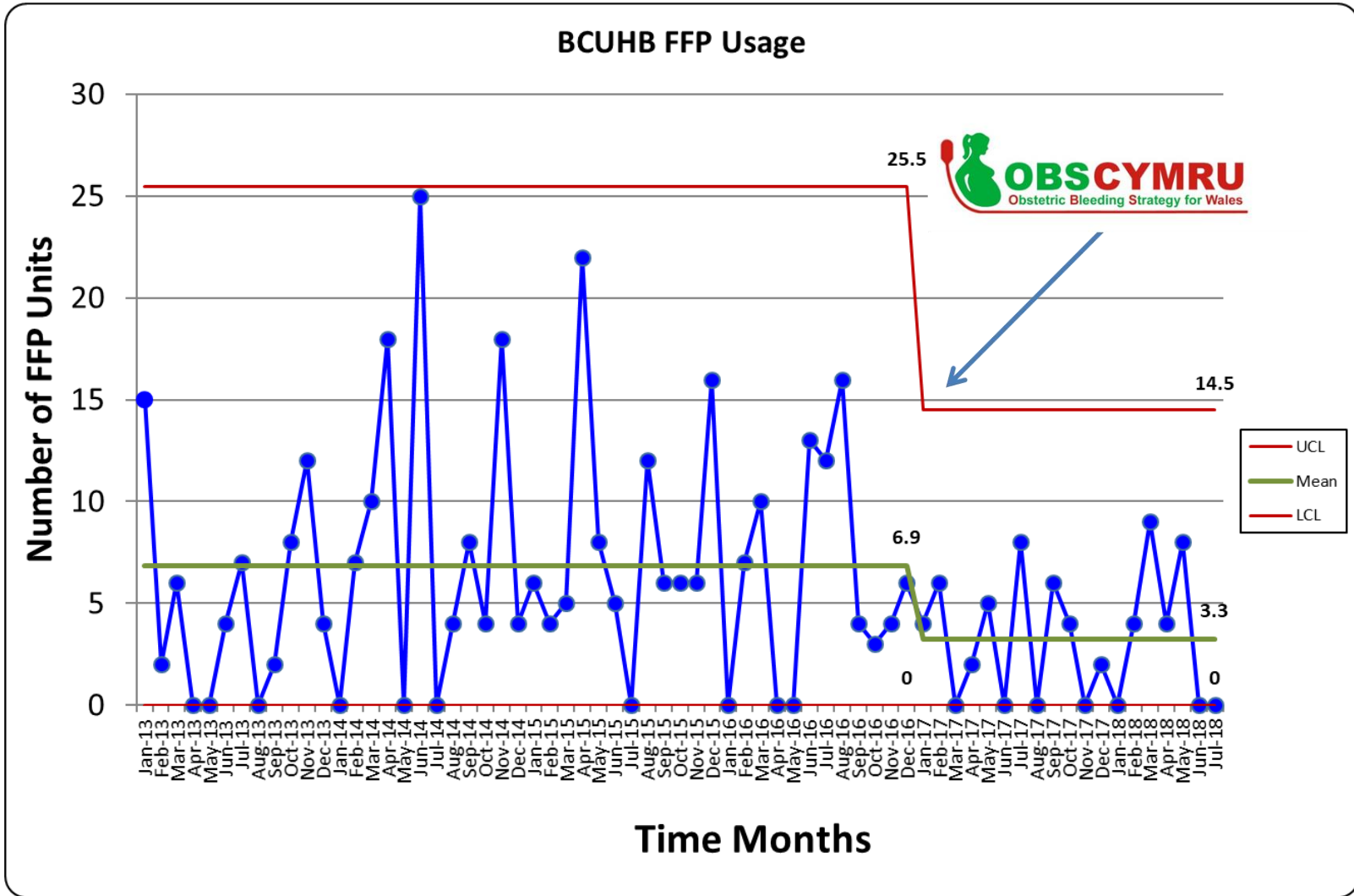


Outcomes for BCUHB

Wrexham Maelor Hospital						
	Maternities	PPH > 1500ml	PPH > 2500ml	Critical Care	Hysterectomies for PPH	> 5 Units Transfused
August 2016 - July 2017	2478	59	11	7	1	5
August 2017 - July 2018	2575	104	26	6	0	0
Glan Clwyd Hospital, Edebyddan						
		PPH > 1500ml	PPH > 2500ml	Critical Care	Hysterectomies for PPH	> 5 Units Transfused
August 2016 - July 2017	2001	50	10	5	1	3
August 2017 - July 2018	2004	69	16	5	3	0
Ysbyty Gwynedd, Bangor						
		PPH > 1500ml	PPH > 2500ml	Critical Care	Hysterectomies for PPH	> 5 Units Transfused
August 2016 - July 2017	2031	61	16	3	2	3
August 2017 - July 2018	2207	75	12	2	1	0
Betsi Cadwaladr University Health Board						
		PPH > 1500ml	PPH > 2500ml	Critical Care	Hysterectomies for PPH	> 5 Units Transfused
August 2016 - July 2017	6510	170	37	15	4	11
August 2017 - July 2018	6786	248	54	13	4	0

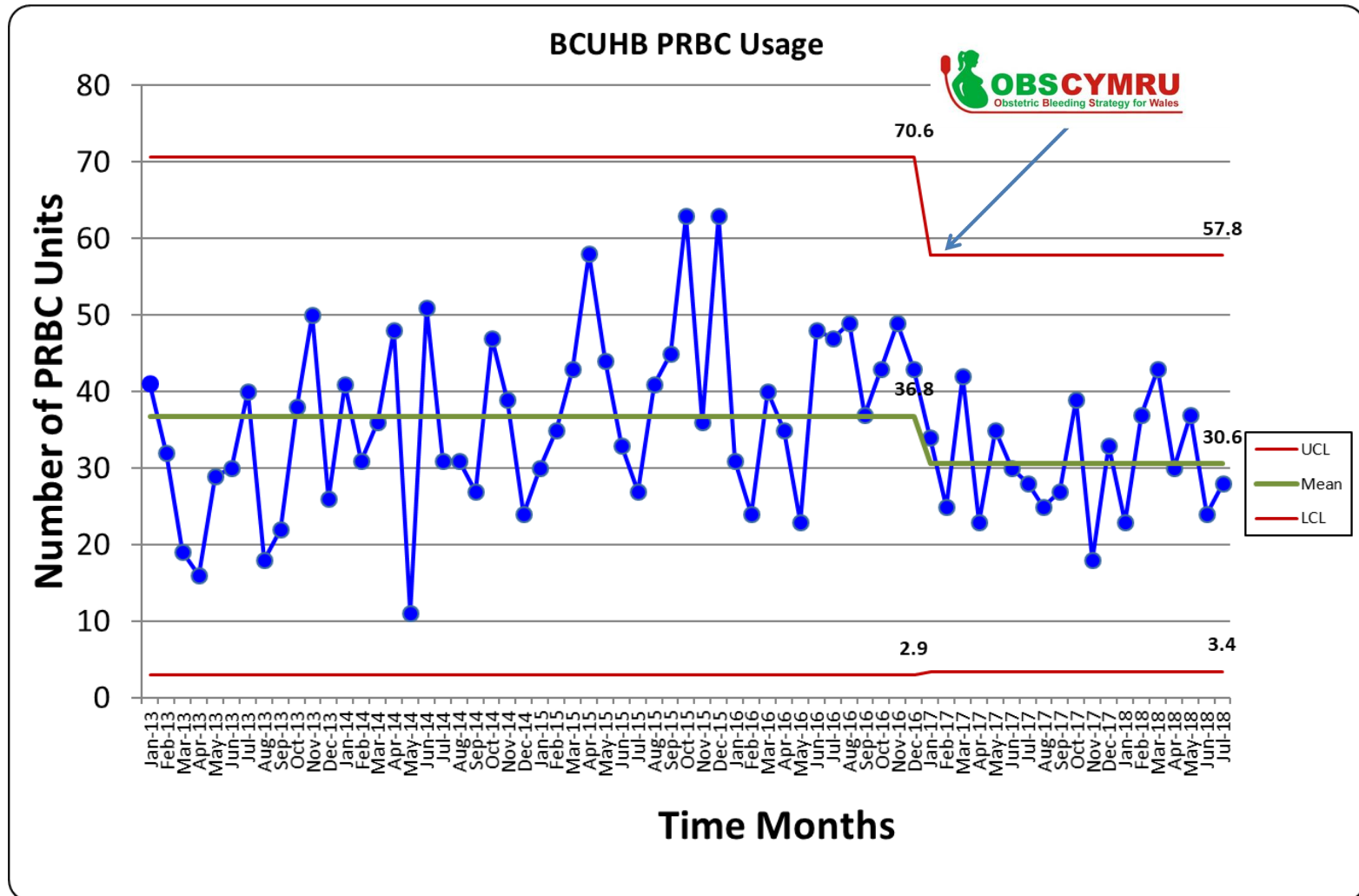


Fresh Frozen Plasma Use BCUHB



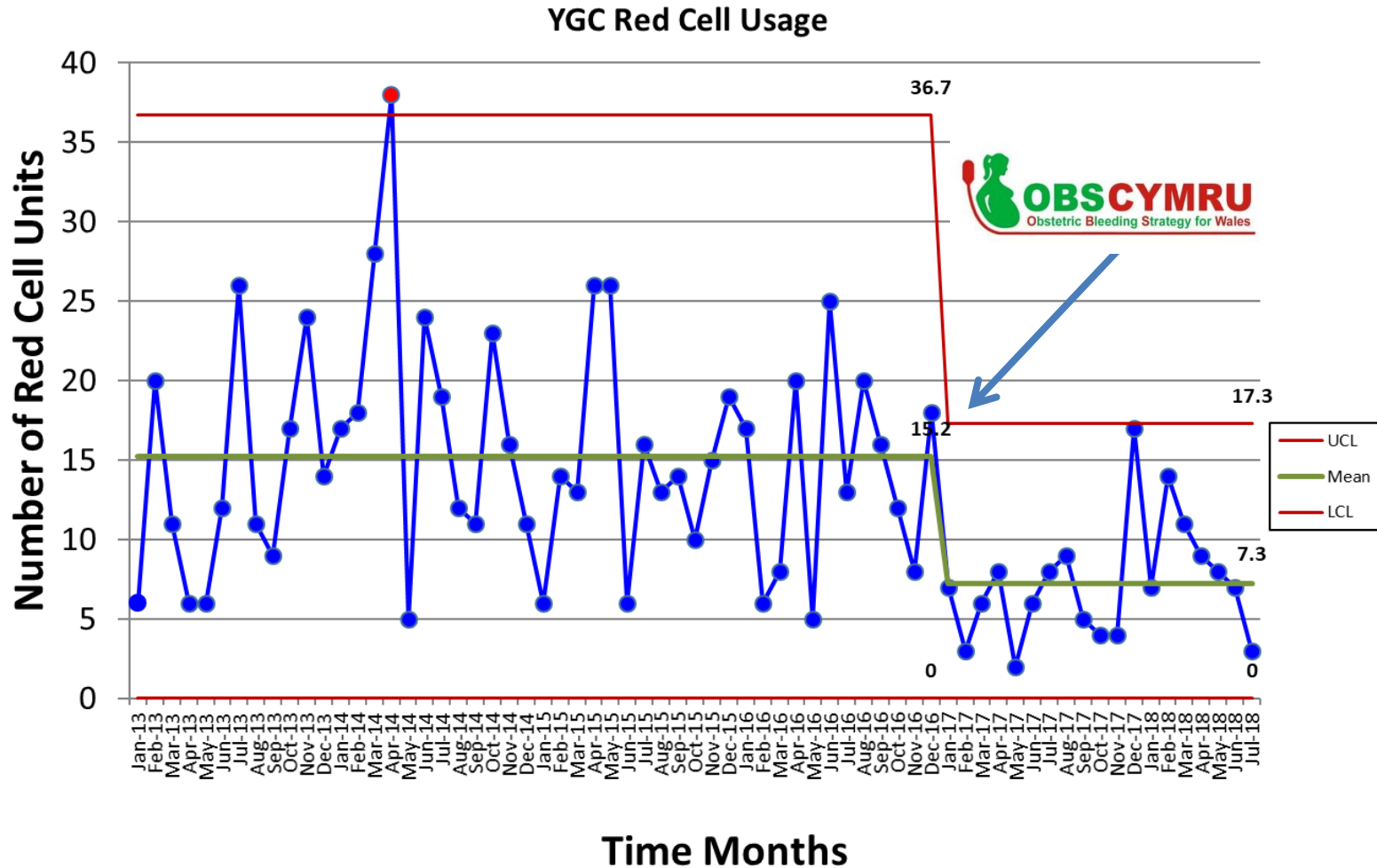


Packed Red Cell Use BCUHB



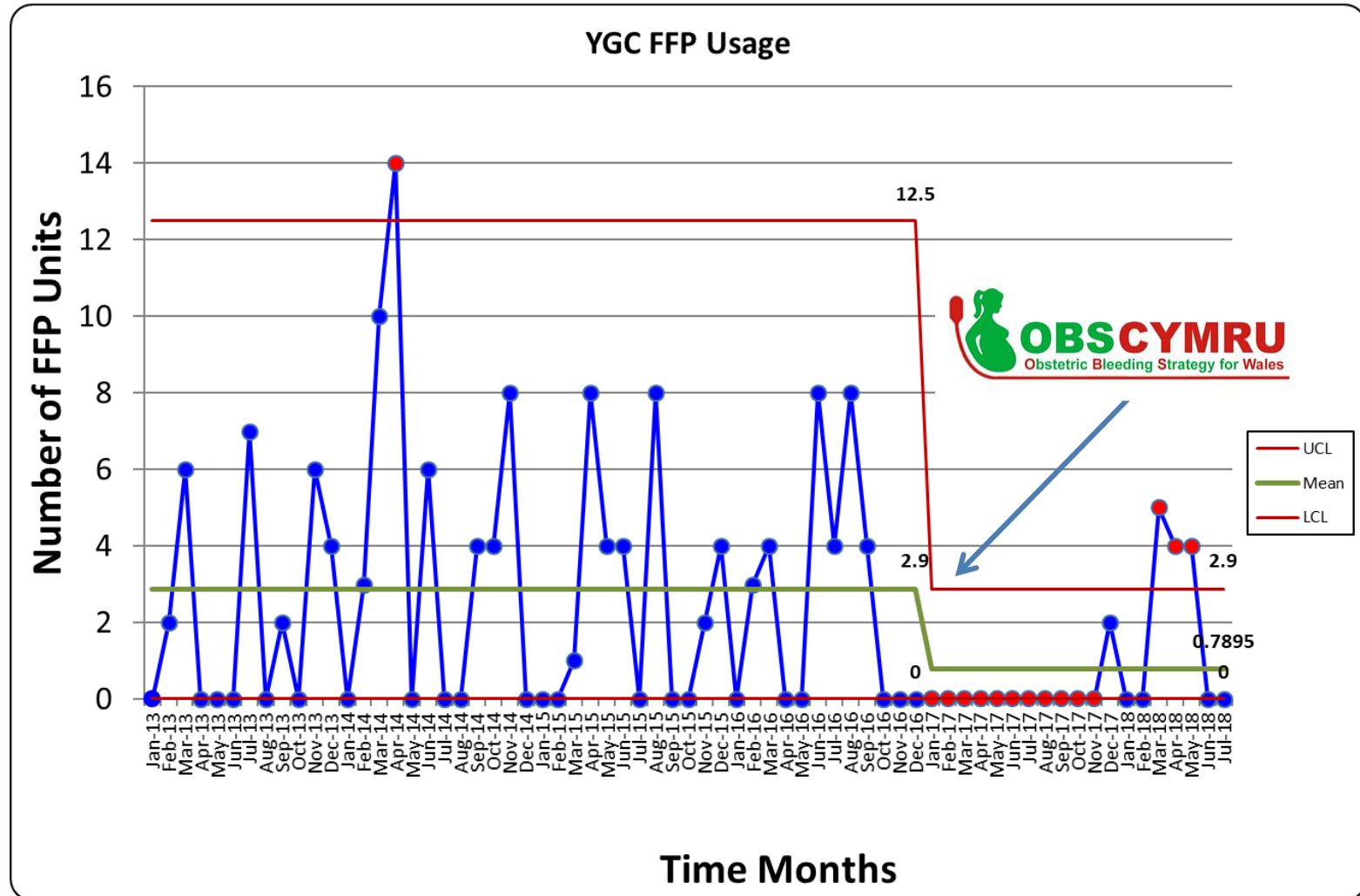


Packed Red Cell Use YGC





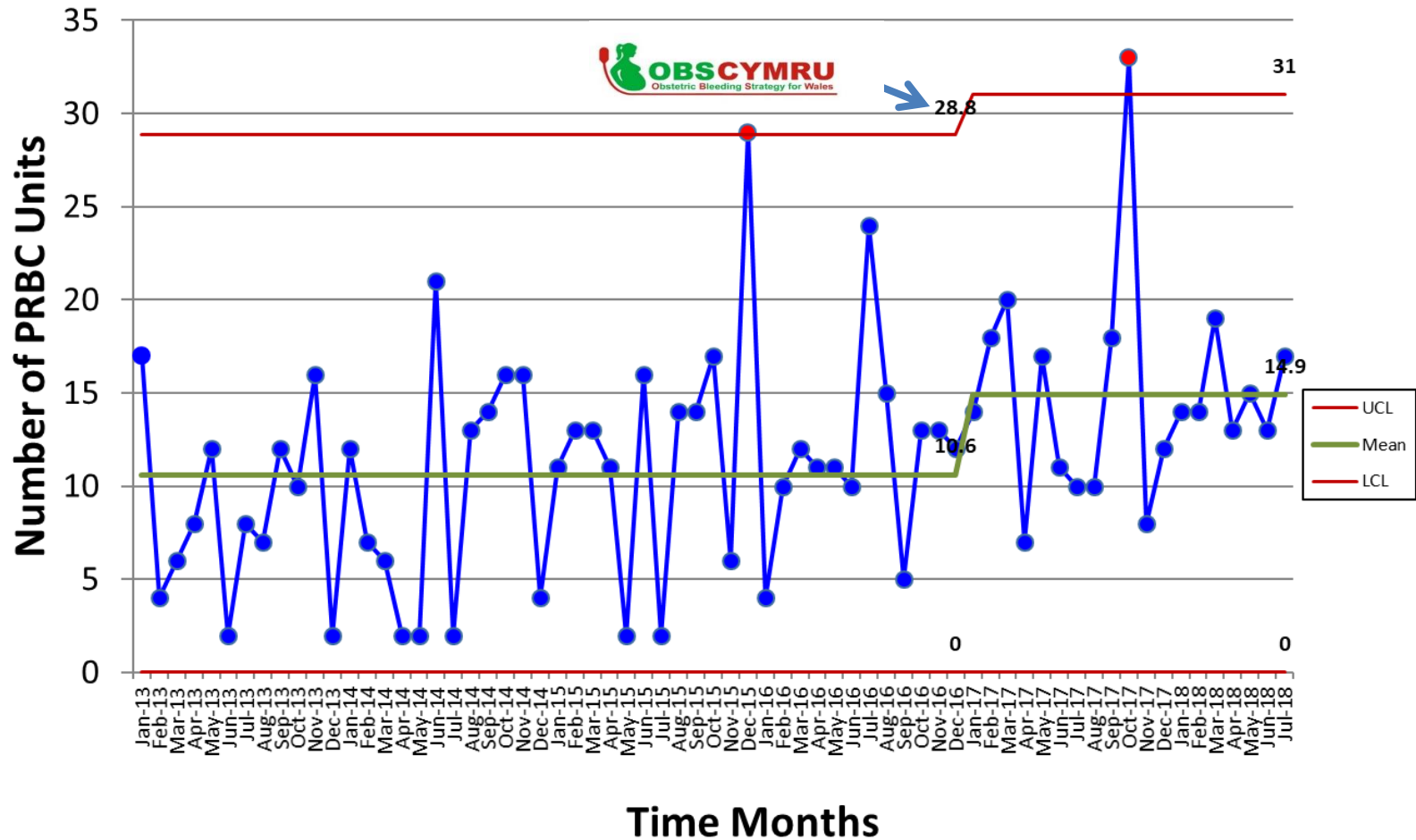
Fresh Frozen Plasma Use YGC





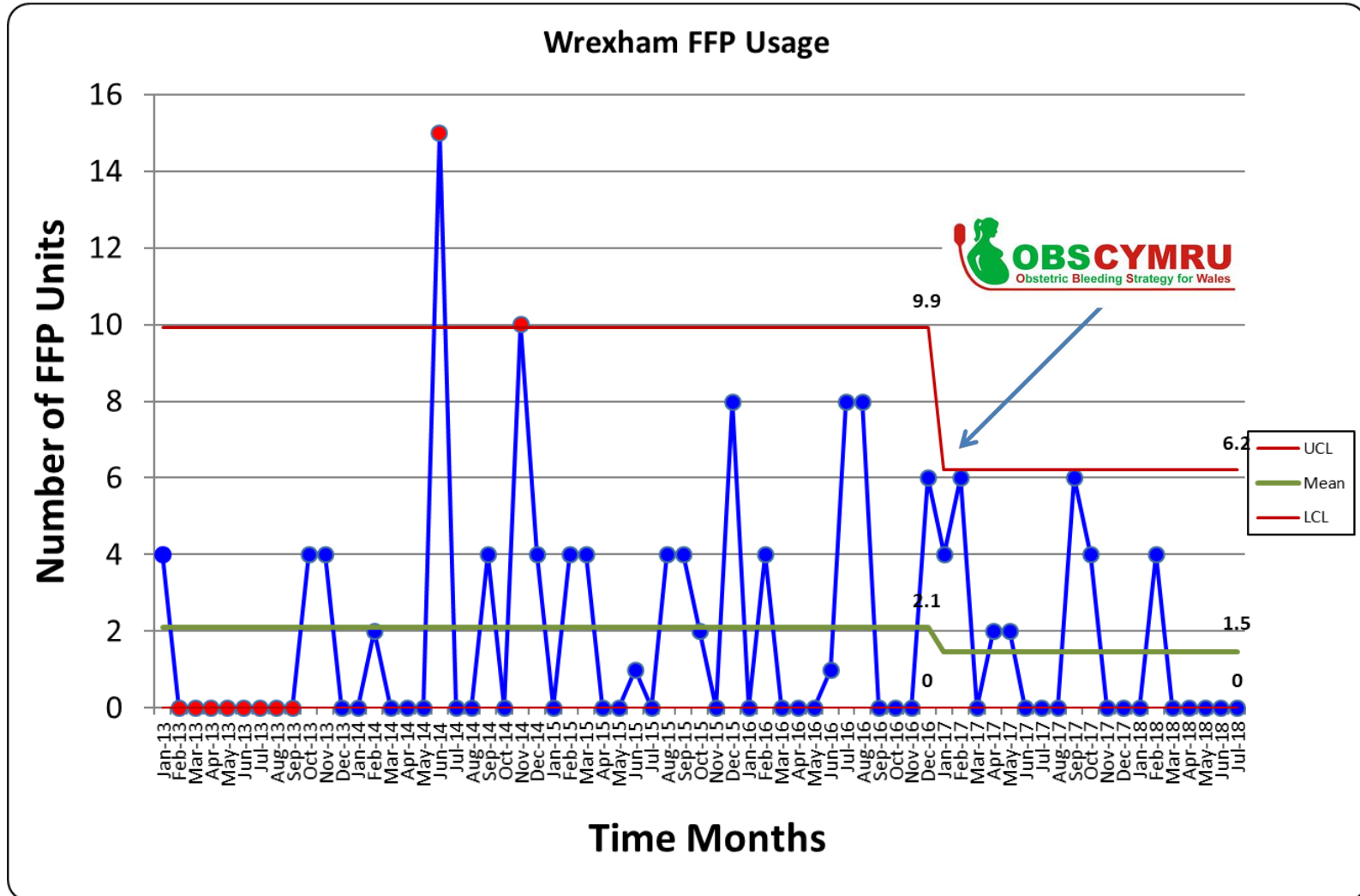
Packed Red Cell Use WMH

Wrexham PRBC Usage





Fresh Frozen Plasma Use WMH



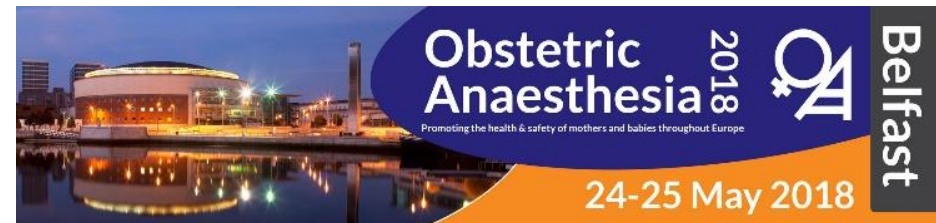


Working Together: Better





Making an Impact





OBS Cymru Summary

Multidisciplinary national programme achieving change across Welsh maternity services

Measuring blood loss a shift in culture and cornerstone of project

Reducing variation and improving care through network of multidisciplinary champions

Making best practice and routine



Thank you to all Collaborators from Across Wales

Nevill Hall Hospital Abergavenny

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Su Roberts
Sunil Kumar
Angela Hamon
Carys Davies
Saran Nicholas

Ysbyty Wrexham Maelor Wrexham

Bronwen Green
Judith Young
Lynda Verghese
Lally Desoysa

Ysbyty Glan Clwyd Rhyl

Helen Hynes
Ingrid Volikas
Maggie Armstrong
Yvonne Jones

Ysbyty Gwynedd Bangor

Gareth Roberts
Lesley Bolton
Catherine Pritchard
Sally Evans

Powys (Community)

Marie Lewis

OBS Cymru National Team

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Diolch

Thank you

***“Working together to reduce harm from
Postpartum Haemorrhage”***

OBS.Cymru@wales.nhs.uk

www.1000livesplus.wales.nhs.uk/obs-cymru

@OBSCymru #measuredbloodloss

