

Patient blood management programme development at Royal Cornwall Hospital

Annika Ryberg

CT2 Anaesthetics

27 September 2012

Agenda

- The idea
- Implementation
- Trends
- Learning points
- Next step

Setting the scene

- Originated by Dr Lars Jakt in 2002
- Data collected for 2002 for all total hip arthroplasties
 - Significant variety between different surgeons
 - Transfusion rates from 20% to 80%
- The feeling was that this was probably not a very good thing
 - Limited evidence
- A business case was later developed by John Faulds, blood conservation coordinator, RCHT
 - Established that ICS saves the trust money
 - Data collected helped prove the point
 - Minimal opposition clinically

What we use



Difficulties with introduction

- Initially perceived as expensive
 - Cost of collection plus cost of processing
 - Transfusion rates initially erratic with or without salvage
- Algorithm for use of ICS altered 2006
 - If Hb >13.5g/dL we didn't use ICS
 - Increased transfusion rates as a result
- Staff
 - Training and rostering of ODPs
 - Competency based training

Concurrent developments

Pre assessment

- Set up in its current format around 2008
- Referral from GP's or other hospital staff
- Close collaboration with haematology
- Patient haemoglobin pre optimisation vital
 - IV iron
 - EPO

Other developments

- Clearer local transfusion guidelines
- Better management of anaemia post op
- Education of junior and senior staff regarding blood transfusions

Management of pre-op anaemia

Pre-Admission Clinic 3-4 weeks before surgery.
Check FBC, reticulocyte count and iron status

Hb<12, no iron
deficiency

Iron deficient

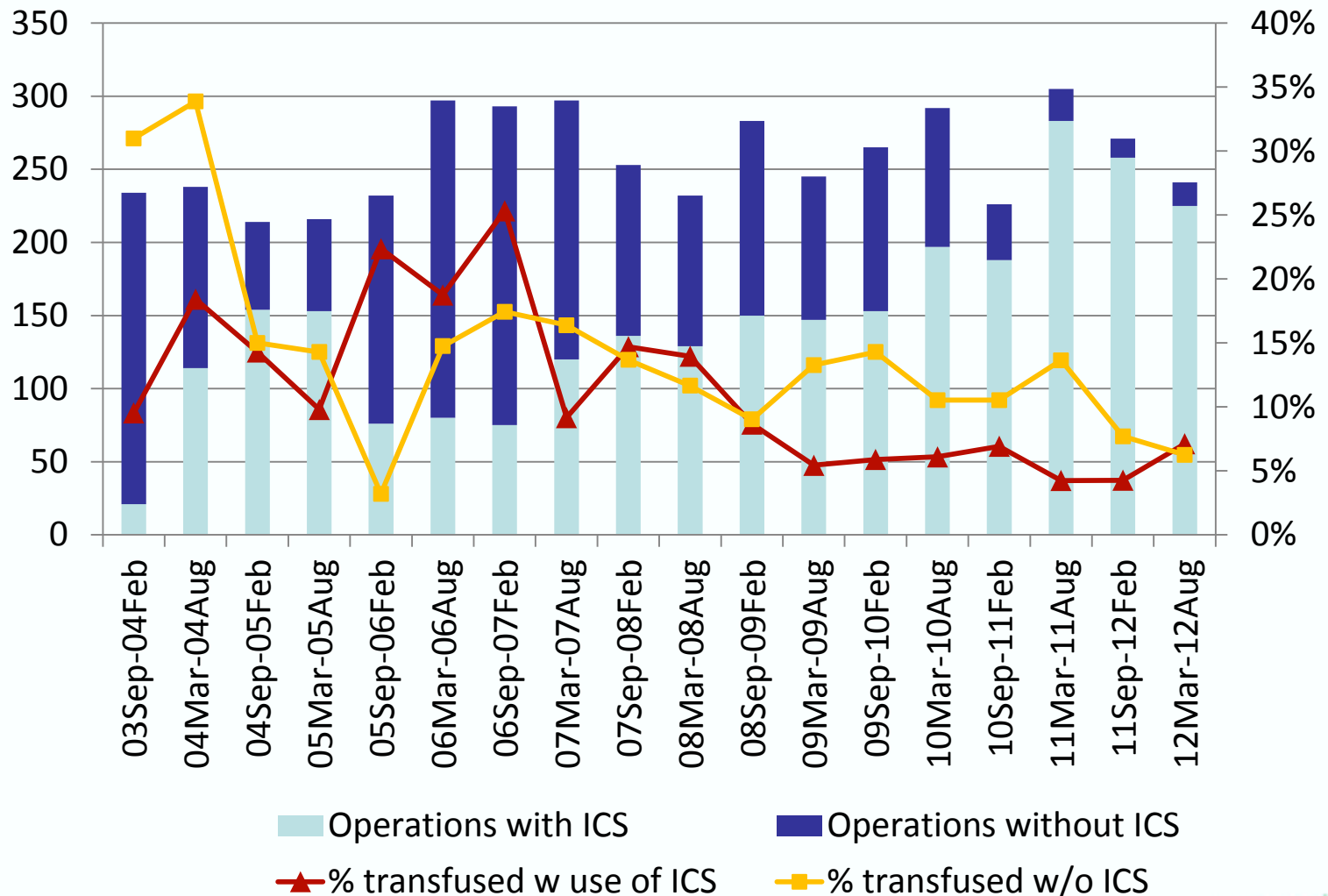
Hb normal

Consider EPO

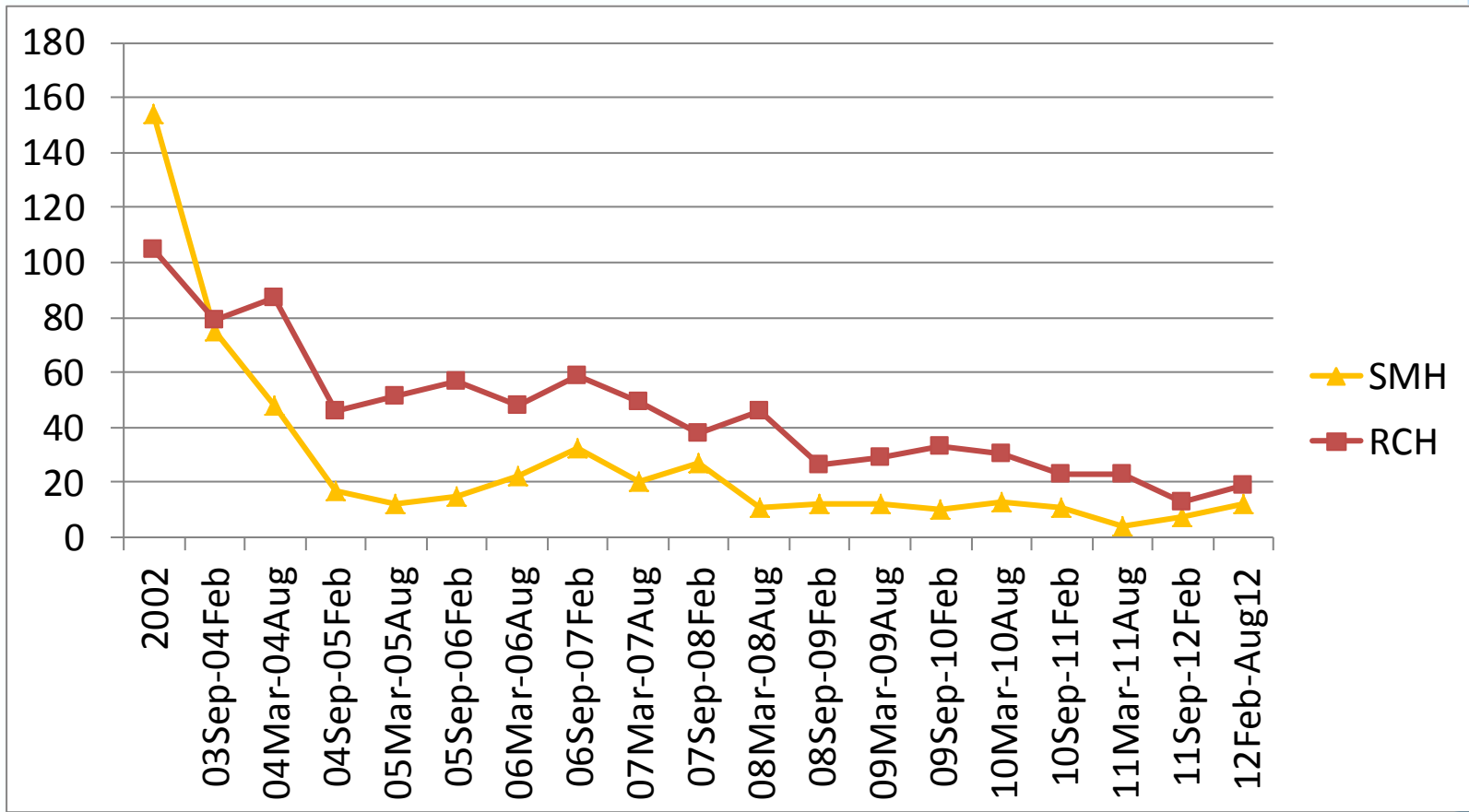
Replace iron
IV

No action

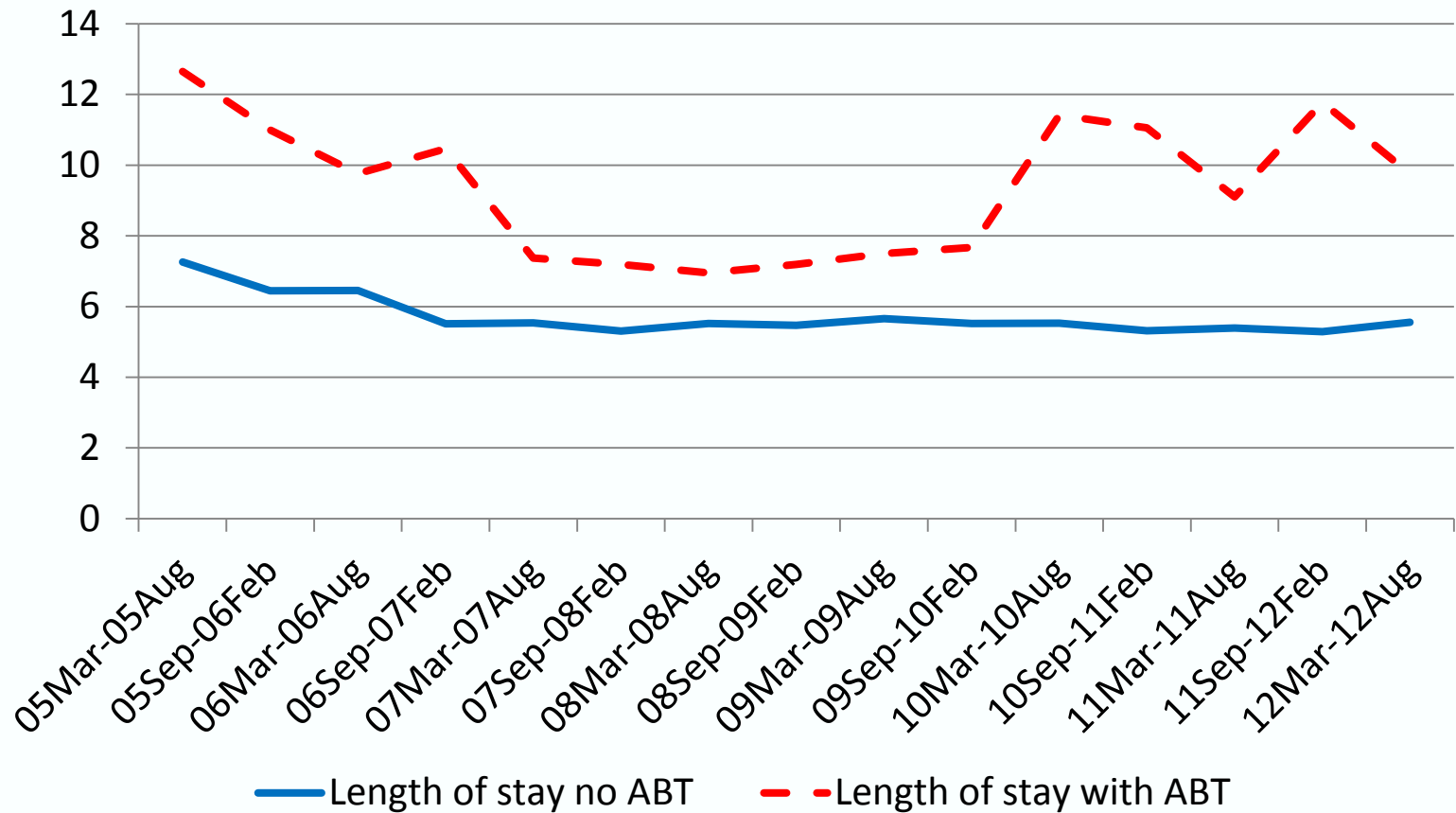
Trends



Units of blood per 100 cases



Trends in Length of Stay



Learning points

- Make it personal
- Hb optimisation is key
- Education, education, education
 - Of ward staff
 - Senior and junior doctors
- Rostering and training of ODA/ODPs important to ensure 24 hour delivery of service

Next step

- Further data analysis
- There's a lot of data to analyse!
 - Establish causative factors
 - Are the trends significant?
- ICS usage expanded
 - Safe in vaginal losses?
 - Other types of surgery/medical patients?

Acknowledgements

- Thank you to
 - Dr Lars Jakt
 - Dr Cathy Ralph
- Contact details:
 - annika.ryberg@gmail.com
- Any questions