Minutes for NW RTC
Pre-Operative Anaemia Wider Workshop
Venue: Manchester Blood Centre
Date: Friday 18th September 2015

Attendees
Dr Kate Pendry (KP)  Consultant Haematologist/Clinical Director CMFT / NHSBT
Craig Carroll (CC)  Consultant Anaesthetist SRFT / RTC Chair
Sanchia Baines (SB)  Transfusion Practitioner, Lancashire Teaching Hospital
Gill Cassie (GC)  Transfusion Practitioner, Lancashire Teaching Hospital
Janardhan Rao (JR)  Orthopaedic Consultant, Countess of Chester Hospital
Kirsten Wheeler (KW)  Pre-op Service Manager, Stockport NHSFT
Emma Mitchell (EM)  Pre-op Sister, Stockport NHSFT
Sharran Grey (SG)  BT Clinical Lead, Bolton NHSFT
Jane Rowlands (JR)  Transfusion Practitioner, UHSM
Tom Dale (TD)  Clinical Perfusionist, Blackpool Victoria
Michael Heaton (MH)  Haematology & BT Service Lead, Pennine Acute Hospitals NHS Trust
Adrian Morrison (AM)  Consultant Anaesthetist, Warrington
Claire Allen (CA)  ST6 Anaesthesia, Pennine Acute NHS Trust
Seema Agarwal (SA)  Consultant Anaesthetist, LHCH
Sumaya Elhanash (SE)  Consultant Haematologist, UHSM
Michelle Rimington (MR)  Transfusion Practitioner, Southport & Ormskirk NHS
Jaya Ganvir-Roche (JG)  North-West Pre-operative Anaemia Project Manager, NHSBT

Apologies
Erica Bates  Senior Clinical Perfusionist, Blackpool Teaching Hospitals NHS Trust
Jayne Addison  Patient Blood Manager Practitioner, NHSBT
Tony Davies  Patient Blood Management Practitioner, NHSBT
Peter Hudson  Clinical Specialist, Blackpool Teaching Hospitals NHS Trust
Lesley Adams  Transfusion Practitioner, Mid-Cheshire Hospitals Foundation Trust
Stephanie Leonard  Lead Sister Pre-op Assessment, Bolton NHSFT
Dr Allameddine  Consultant Haematologist, Pennine Acute NHS Trust
Sue Andrews  Transfusion Practitioner, Pennine Acute NHS Trust
Samah Alimam  Specialty Trainee Haematology
Stewart Masheter  Consultant Anaesthetist, Bolton NHSFT
Tim Heyes  Consultant Cardiothoracic Anaesthetist, UHSM
Christopher Poole  Transfusion Nurse Specialist, Stockport NHSFT
Marie Wilcock  Trainee Advanced Nurse Practitioner, Blackpool Victoria
Mike Ashcroft  Charge Nurse, SRFT
Jill Livingstone  Transfusion Practitioner, UHMBT
Alastair Duncan  ST6 Anaesthesia, Wrightington, Wigan & Leigh Trust
Louise McCreery  Transfusion Nurse Specialist, Wrightington, Wigan & Leigh Trust

Minutes
Jaya Ganvir-Roche  NW Pre-operative Anaemia Project Manager

Actions

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<td>4a</td>
<td>To send link to the group of recent BCSH guidelines on pre-operative anaemia management Kotze et al 2015</td>
<td>JG</td>
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<td>6a</td>
<td>To inform the group when Hospitals &amp; Science website is running</td>
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<td>To continue working on the measurement tool</td>
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<td>To liaise with contacts in pre op assessment (KW) and</td>
<td>CC and KW</td>
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<th>anaesthetics (CC) to encourage engagement with the pilot project</th>
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<td>9</td>
<td>Request copy of SGs algorithm for sharing</td>
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<td>8</td>
<td>Complete measurement tool and pilot it</td>
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<td>9</td>
<td>Continue to explore means of commissioning a region-wide pathway</td>
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1 Welcome & Purpose
Dr Kate Pendry welcomed everyone to the workshop and thanked them for attending. Introductions were given by each member.
KP explained one of the purposes of the workshop is to share experiences in setting up management of pre-operative anaemia along with providing an overview from the pilot sites.
The pilot sites are:-

- Blackpool Victoria Hospital - Cardiac
- Countess of Chester Hospital - Orthopaedics
- Lancashire Teaching Hospitals - Upper GI
- Pennine Acute Hospitals - Colorectal
- Salford Royal Hospital - Orthopaedics

2 Minutes of the last meeting
These were accepted as a true and accurate record

3 Overview of progress from all hospitals
An overview was given for each of the pilot sites.

**Blackpool Victoria Hospital**
Erica Bates sent the following update:

- Due to the restriction of not being able to start patients on the pathway unless they had an FY postcode, Blackpool have managed to secure an advanced nurse practitioner who will give the IV iron on the cardiac day case unit at the hospital.
- This will mean Blackpool will be able to widen their patient group to any anaemic patient passing through the cardiology clinic.
- Previously only managed to ‘officially’ recruit 2 patients since February and both were non-iron deficient and have not come to be operated on yet. This means they have no data to report yet on the success of the investigation/treatment of the anaemia.
- The pathway has raised awareness of anaemia amongst anaesthetists and surgeons and EB has been approached on numerous occasions on when/whether they can give IV iron to a patient. Unfortunately, they have asked about it too late (urgent inpatients). Patients...
being listed as urgent only 1 week or so before, but it has raised the question of whether they should be given it anyway if they are iron deficient to aid in their recovery.

- Have used the algorithm designed by KP and administered IV iron successfully to one patient who had cancer but needed heart surgery. The surgeon was prepared to wait 4 weeks as she was a high risk, frail tiny lady and he felt the anaemia would contribute to her risk of transfusion and not help her recovery before her next cancer surgery. She did raise her Hb from 11 to 14 and underwent a TAVI procedure. She bled a little bit during the procedure dropping her Hb to 9 but did not receive a transfusion. Her cancer surgery was scheduled to be done 3 weeks after the TAVI so a second dose of IV iron was given to her whilst she was on ITU to boost her levels again. All being well the surgery will be done the following week.

- TD gave an explanation of a case study of a second patient who was not on the pathway but was given IV iron by the gastro team.

- She underwent cardiac surgery having previously been cancelled due to her anaemia. She did not receive a transfusion during her stay and recovered well.

- The new pathway should commence in October and it is hoped Blackpool can recruit more patients.

- The biggest obstacle is the time taken for the IV iron to work and whether the clinical need of the patient means they can wait for it to work. This rules out most of the urgent patients who usually could benefit from it.

- On reviewing the notes they are quite often in-patients for a couple of weeks undergoing tests and being stabilised before surgery.

- One idea EB suggests, is that maybe patients should be tested immediately on admission and treated if appropriate.

- Anaemia awareness and the availability of a safer IV iron preparation needs to be promoted to the GPs so that the patients can be investigated and treated early in their surgical journey or when the possibility of surgery arises either on an admission or in the GP surgery.

- CC thanked Blackpool for managing one of his patients, explaining it was easier and only took one day for a case from Fleetwood whereas it took Salford 4 weeks.

- KP asked the question why 2 patients in 2 months? TD explained elective patients were coming to theatre also, and it is very much dependent on who the consultant is. Any engagement with anaesthetists and cardiac surgeons- all work well together.

- Cardiac surgery patients are from a range of areas including Cumbria, Fylde, Lancaster, Blackburn, Burnley, Morecambe Bay, Preston.
Pennine Acute NHS Trusts

Michael Heaton gave an update.

- Pennine Acute has been involved with the regional anaemia group from its beginning and was asked to look at pre-operative phase of iron deficiency anaemia in colorectal patients. Unfortunately it has been unable to progress within the colorectal cohort as no patients were identified at the beginning of the project, despite efforts to engage with the lead colorectal surgeon and enhanced recovery nurse. This was no reflection on these individuals but one in which patients could not be identified.

- As a consequence, the blood transfusion dept took a holistic approach and embarked on a number of initiatives and projects which included the single unit policy, changes to prescribing and administration practice, pre-transfusion practice and the use of IV iron in all patients and the introduction of cell salvage.

Progress to Date

- The Single Unit Policy has been introduced with demonstrable changes to practice which has resulted in approximately 15% of all blood transfusion episodes now being of a single unit.

- The Trust blood prescription forms have been amended to include prescriber checklists, guiding the clinician to ensure that all diagnostic testing has been evaluated before transfusion and that the transfusion is appropriate. A laboratory checklist is in place for laboratory staff to challenge inappropriate requesting to further help avoid unnecessary and inappropriate blood transfusion

- Engagement with divisions of medicine, surgery and gynaecology has supported the introduction of IV iron as a suitable alternative to blood transfusion. This has been supported and approved by the Trust Drugs and Therapeutic Committee.

- Unfortunately, a business plan to introduce anaemia services to primary care has been delayed as a consequence of the CCG’s requiring more evidence of clinical benefits and a detailed cost benefit realisation paper. Work continues in this respect. A local tariff has however been established with Trust Finance and a decision has been taken to establish the service internally with the expectation that GP’s will want to use the service as a suitable alternative to blood transfusion once they realise that it is available. Use of the service will then attract the tariff.

- Prescription guidance for the use of IV iron have been written into policies and procedures for anaemia management in pre-operative, surgical, medical and
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gynaecological guidelines.

- A cell salvage co-ordinator has been appointed into the blood transfusion support structure, and despite the limitations of a single-handed co-ordinator, cell salvage has become a routinely available service to vascular and other areas of surgery. This operates Mon-Fri 9-5 with a medium term objective of further engaging with up to four operating departmental practitioners to increase the number of staff available to operate the Fresenius CATS instrument and provide cell salvage more robustly.

- Recently one of the anaesthetists with an interest in colorectal surgery has undertaken an internal audit and identified up to 38 patients who may have benefitted from IV iron. This in conjunction with an audit of 130 patients receiving IV iron across the Trust, may stimulate the work into this group of patients and allow data to be provided to the project group.

- To date, significant blood savings have been realised as a consequence of the patient blood management programme involving the changes introduced to prescribing, administration and use of IV iron.

Royal Bolton Hospital  
Sharran Grey gave an update

- Management of anaemia in primary care pathway being finalised. Joint work with CCG colleagues (GP lead and demand management manager). Aims to assist GPs with detection, investigation and treatment of anaemia. It applies to all types of anaemia (not just IDA) and is to be applied to elective surgery referrals as well as medical patients.

- The pathway supports three secondary care projects/services:
  - Ambulatory Care Unit where A & E and GPs can refer patients for urgent care (IV iron or blood transfusion as appropriate)
  - Gastro IV iron service where GPs can refer patients for IV iron regardless of whether they need GI investigation or not
  - Pre-assessment clinic where patients are screened for anaemia and referred back to GP for investigation/treatment (as per pathway guidance)

- Pathway going through CCG and Trust Governance process for ratification
- ACU service has started
- Gastro service will start when the pathway is ratified/implemented
- Pre-assessment pathway needs more work (late referral to pre-op clinic is a problem)
- GP engagement was no problem
- Go to CCG Governance group to ratify the process
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- KP asked whether secondary care have agreed to funding. SG explained the expense is Ferinject.  
- MH enquired who pays. SG explained there is a separately agreed tariff (Best Practice Tariff)  
- CC explained the success of an algorithm is in its ease of following it, it is about the management of anaemia, not just iron deficiency  
- KP enquired which GPs have been approached. SG explained she has met with the GP Leads and they are aware of the money generating benefits of using Ferinject.

**Stockport NHS Foundation Trust**  
**Kirsten Wheeler gave an update**

- KW explained they wanted to manage anaemia themselves ie within the pre op assessment service, and to run the service in-house.  
- Audited admitted elective patients with anaemia 2014-2015. A total of 103 patients who would benefit from iron therapy  
- Engaged with pathology to automatically add ferritin/B12/Folate to all anaemic pre-op patients. Patients come to the pre-op clinic and are seen early on the pathway, and bloods are done automatically  
- With the help of Blackpool Victoria, Stockport have adapted their pathway  
- Pathways approved with haematology and all surgical consultants  
- Tariff already in place for IV iron in IBD and maternity  
- Business case for nursing hours approved by AD  
- Audit form/ICP/SOP created and pathway within pre-op team agreed  
- Location secured for IV iron delivery by pre-op nurses  
- Senior prop-op team on NMP course  
- Launching in late September  
- Working alongside Gastro and General Surgery developing a Trust-wide strategy  
- KW gave an explanation of the Pre-op Network

**Lancashire Teaching Hospitals**  
**Sanchia Baines gave an update**

- Feel like they are 'banging their heads against a brick wall' as there is continued lack of senior clinical support  
- Nursing staff have continued to support the study  
- All documentation is in place but require commitment from medical staff re the prescription  
- July 1st had been identified as start date  
- 1 patient recruited  
- Meeting arranged to review progress-limited attendance  
- No feedback from emails by TPs  
- SB has contacted many others in her Trust including anaesthetist, oncologist, haematologist but has not
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received any feedback
- SB explained all these people were involved in the initial discussions and appeared to be on board, but without medical input SB feels they cannot go any further
- SB considering whether to withdraw from the project
- SB asked the group for Anaesthetist contacts
- CC explained they are further ahead than many others and explained he will talk to an Anaesthetist
- KW explained she has Preston links and kindly explained she would contact them
- CC suggested having Pharmacists as a link as Preston already have an IV iron service
- Surgical consultant pays for prescribing on IV iron, patient sees the upper GI nurses
- The group agreed it is not best practice if anaesthetist does not know the patient

Salford Royal
Craig Carroll gave an update
- CC thanked Blackpool and Rochdale who have been able to provide IV iron to patients who are tertiary referrals to Salford.
- To date Salford have recruited 4 patients to PREVENTT
- The SRFT pilot has moved away from its initial plan as there has been a re-modelling in the delivery of orthopaedic services for the Trust, it was not viable to continue with this patient group.
- Therefore have been able to add the project to the ‘Better Care, Lower Cost’ initiative that has been heavily sponsored by the Trust Executive. As a result, been given managerial support and a multi-disciplinary team consisting of senior project manager, CD of theatres and peri-op care, accountancy, senior pharmacist, the pre-op clinical lead, the lead nurse in pre-op and an Acute physician.
- Recent acquisition of audit data has demonstrated that 1600/12000 patients from Jan-Sept of this year have been identified as anaemic in the pre-operative clinic population.

Further analysis is ongoing to identify
- proportions of patients with mild, moderate or severe anaemia
- which patients were investigated further with blood tests, invasive/radiological investigations
- number of patients who received anaemia treatment prior to surgery
- number of patients who had anaemia as part of their surgical presentation
- number of patients who underwent surgery whilst anaemic
- number of these patients who received a blood
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transfusion peri-operatively

Ongoing sticking points

- Establishing a pre-op anaemia orderset-has now been achieved.
- Establishing an automated system to perform anaemia screening investigations on patients identified as anaemic on their first FBC-this has now been achieved also.

What to do with the patient who is identified as anaemic and the cause is unknown?
SRFT is to establish an Anaemic Investigation Unit, to take patients from pre-op clinic/other referral areas. Service will have 1PA of consultant time/week. It is linked to Gastroenterology, Urology and Gynaecology.

How to deliver the IV iron service?
The solution being developed is an IV iron clinic, where patients can receive Monofer injection in a rapid through put ‘drop-in’ dept. The idea being that patients are identified as iron deficient in pre-op and then referred directly for initial IV iron therapy at the earliest opportunity.
- Prospective data collection-SRFT is awaiting further decision from this group as to what data is to be required for the regional service.

Liverpool Heart & Chest Hospital
Seema Argawal gave an update
- Set up a pilot 2 years ago of 20 patients that was reliant on business case approval at that time but did not progress
- Due to start again in November 2015
- Have an algorithm, patient go to pre-op clinic and have investigations performed, SA will prescribe the iron
- KP enquired about timescales. SA explained they are allowed to stop the clock
- Using Monofer

Countess of Chester Hospital
Janardhan Rao gave an update
- The setting up of an integrated pathway was put on hold until they had a full complement of Gastroenterologists to staff an endoscopy rota to look for the causes of anaemia
- There are plans to start this once they have appointed further gastroenterologists
- Have approached the CCG who are fully supportive but did not want the clock to stop whilst the investigations were being looked at
- There was no volition from the CCG to fund a full investigation into anaemia
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- Have placed the use of a Tranaxemic Acid as a regional audit standard via AQ for Primary hip and knee operations, which will go into force probably in April 2016, as shadow measures
- Normothermia which reduces bleeding potential intraoperatively has also been placed as a new measure for AQ north west hospitals audit for primary arthroplasty procedures
- Looking to trial a new viscoelastic device for massive haemorrhage procedures, to reduce transfusion requirement.

**Wythenshawe**

Sumaya Elhanash gave an update

- 2 anaesthetists including Tim Heyes interested to set up service for cardiac patients
- Set up pathway from this group and adapted Hb levels
- Now ready to test the measurement tool

**Warrington**

Adrian Morrison gave an update

- To start working on an algorithm

### 4a Recent research supporting pre-op anaemia

- JG had attached a list of recent research references with the papers for information.
- The group thanked her and agreed they were useful.
- JG to send the link for this article to the group.

### 4b New Guidelines

- JG had attached new guidance published by the RCN on iron deficiency anaemia and presented the main summary findings.

### 5 Regional IV Iron Policy Discussion

- JG had attached 2 policies, kindly sent from Blackpool and Pennine Acute to the group members.

### 6a Toolkit of Resources

- As the Hospitals and Science website was down, unfortunately JG was unable to show the group the new toolkit of resources she had developed.
- JG will send a reminder to the group once it is up and running again.

### 6b Developing Leading Edge Pre-op Assessment conference update - Item deferred
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- KP informed the group she has been working with Informatics, and that the data we hope to collect is technically possible
- The idea is to performance monitor the application of pre-op anaemia
- KP asked the group for any feedback, explaining this is the data collected in Canada on their successful programme
- The group agreed it is going to be difficult to collect data
- KP asked for feedback re collection of Tranaxemic Acid
- JR explained that each hospital submits their own data
- KP explained the group will continue to work on the measurement tool outside of the meeting

9 Primary Care/ CCG Update
- KP shared with the group the outcome of the meeting that took place with herself, a CCG Lead and JG.
- KP explained it is a vicious circle in that the CCG’s would like to see the evidence of patient benefit first
- JG showed the group the list of 9 Proposed Standards that have been disseminated to CCGS, LMCs and the Public Health England
- KP explained which Standards our project matches- Health Improvement, Cancer Referral and Best Care
- KP informed the group we would like to ascertain a way of influencing more than 1 CCG. That we are thinking of the wider North-West region or Devo -Manc
- SG kindly agreed to take this item to her primary care contact and promote it with her network.
- KP suggested that Bolton could be an exemplar site

10 Next Steps
The group will continue to work on their implementation plans, share good practice and learn from each other.

11 AOB
KP disseminated a Greater Manchester Health and Social Care Devolution document to the group and gave an explanation.
JG to send the link to the group

12 Date and Venue of Next Meeting
Friday 27th November
1pm-4.30pm
Manchester Blood Centre
Plymouth Grove
Manchester
M13 9LL