



Electronic Order Comms for Blood products

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Contents

- “ Why electronic ordering?
- “ Incorporating decision support
- “ How this works in the laboratory
- “ The paperless vision – managing without a card!





Why order products electronically

- “ Bring the process into the 21st Century
- “ Better information on why the request is being made
- “ Simpler for both lab and medical staff
- “ Allows you to use decision support!





A word of caution

- “ Need to agree a process for urgent requests
- “ Must minimise delays for the provision of products for bleeding patients

- “ OUH
 - . MHP – only activated by phone. Need to know the request is being dealt with
 - . Urgent requests are placed on order comms and the lab is then phoned so they are aware



Use electronic ordering to help!

- “ For routine requests – we have linked the prescription for products with the order
- “ So they can't order without prescribing and vice versa
- “ Pre-operative requests
 - . Limited (we routine use remote issue)
 - . Separate pre-op powerplan without prescription



Blood Requested on EPR – ‘PowerPlan’

Step 1: Product required selected

Step 2: Order entry form completed with details of transfusion

Search results for 'red':

- Red blood cell folate, blood
- Red Cell Folate Careset
- Red cells (Paediatric Special Requirements) PowerPlan
- Red cells (Paediatric) PowerPlan
- Red cells (Special Requirements) PowerPlan
- Red cells PowerPlan



Details for Red cells issue

*Date/Time Required: []

*Diagnostic Group: []

*Clinical Details: []

Haemoglobin: []

Pregnant: []

*Red Cell Transfusion Criteria: []

*Special Transfusion Requirements: []

Remote issue: []

*Red Cells - no. of units: []

*Location of patient at time of transfusion: []

*Bleep/Telephone Number: []

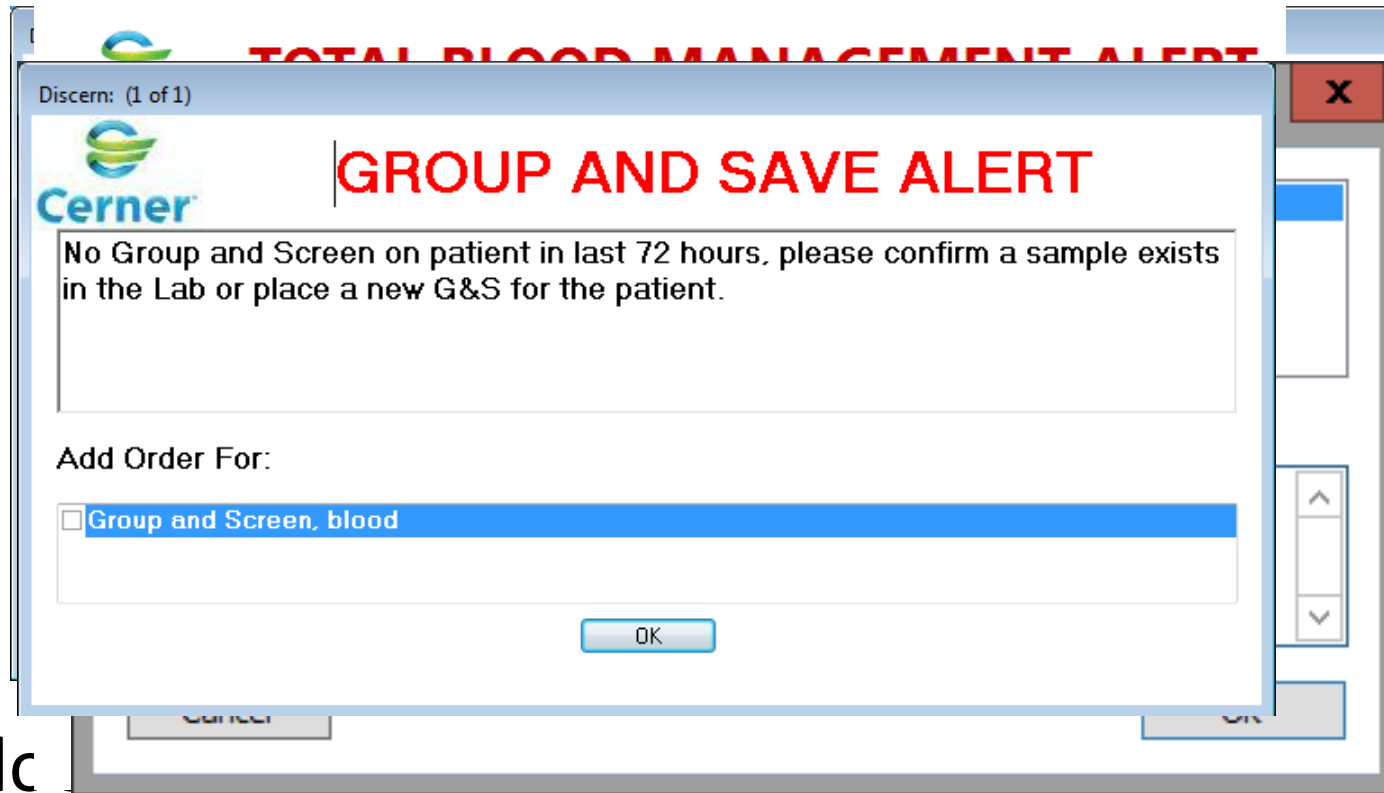
Step 3: Order and prescription placed and received in laboratory

Component	Status	Details
Remote issue red cells PowerPlan (Initiated)		
Red cells issue (XM)	Ordered (Completed)	02/Mar/18 11:55:00, Trauma, bleedi... Remote Issue order completed auto...
Red cells	Ordered	Dose: 1 unit(s) - intravENous - every 4 hours - Number of Units: 1 dose(s) - ...



The latest Haem is displayed
The order entry form defaults to 1 unit.
for the patient are mandatory.

Decision support alerts appear if:-



B1c

- “ There is no current group and save sample, user can add order for group and save here.”
- “ Haemoglobin result is over 14 days old (Platelet Count: >24 hours for platelet orders) override reason must be provided”
- <80g/l Haematology inpatient



Moving to electronic orders

- “ Reduction in work – requesting
- “ Reduction in errors made at requesting
- “ Better information
 - Patient demographics
 - Clinical information
- “ Less phone calls
- “ Streamline lab work flow
 - The paperless lab ?

12 Missing Required Details On Table Sign

P0481.138262800040 05 September 2017 15:5

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P0481.138262800040 05 September 2017 15:5



NO request card!

- “ Think about what do you use the request card for?
 - . Checking sample against
 - . When making a work sheet
 - . For knowing what you have outstanding
- “ We went through this
 - . We now don't miss request cards!
 - . we redesigned your processes to use an electronic record
 - . This **MUST** be led by the laboratory senior staff





Redesign

“ THEN

- “ Check sample against request card
- “ Use request cards to make a worksheet
- “ Check request cards to know what red cells are needed and when
- “ Knowing when ‘specialist products’ are ordered

“ NOW

- “ Check sample against electronic order
- “ Use samples to make the work sheet
- “ Use outstanding work lists on LIMS
- “ Introduction of a ordered units ‘white board’



Checking units once issued

- “ We previously had checked units once issued against the request card
 - . Ensure all patient information correct
 - . Ensure the units meet the requirements (including date: time)
- “ We now check the units as we issue them to double check they are in date for the date: time required
- “ We also use verify label on the electronic tracking system to ensure patient information is correct and right compatibility label on the unit



Whats been good?

- “ Requesting both group and saves /product issues is quicker
- “ Much less ‘typos’ as the orders appear electronically
- “ Different issue sets for different sites works well (based on the patient location)
- “ Seeing out standing work is quick and easy



Advantages of electronic ordering

- “ Request audit (Jan 2015)
- “ 100 paper and 100 electronic requests
- “ Examined to determine what information was available for each request

	Paper requests	Electronic
Name	100%	100%
MRN	99%	100%
DOB	100%	100%
NHS Number	24%	100%
Consultant	22%	100%
Location	69%	100%
Diagnosis	55%	100%
Special Requirements	1% (1/100 expected)	100% (47/47 expected)
Contact number	88%	100%



Other advantages

- “ We know what is coming in before the sample arrives
 - . Allows us to order phenotyped units earlier
 - . Allows us to ‘spot’ when we may need to order additional units
 - . Alerts us to HLA matched platelets being required before the clinical team phone us!
 - . No longer need to scan request cards!
 - . Less confidential waste



Other problems

- “ Clinical staff not putting in the correct date:time products are required
 - . They tend to just press return and then wonder why there is no product available when they needed it (its been returned!)
- “ Clinical staff ordering and prescribing different amounts of units!
 - . Causes confusion on the ward
 - . System currently unable to copy from 1 set to another



What would I improve?

- “ I’d like to be able to branch to requesting directly from outstanding orders expected
- “ The refreshing on the outstanding orders doesn’t always work!



Getting clinical engagement

- “ Order comms was rolled out through the trust
- “ Blood product ordered was rolled out with the medicines management – which worked well
- “ We encouraged initially when people called wanting to order products
- “ Now we are tough – unless it’s an MHP – an electronic order **MUST** be made

Reduction in OUH blood use and cost savings 2017

	2016 (units)	2017 (units)	% OUHT change	% national change	Cost reduction
Red Cells	21,511	20,058	-6.7%	-5.3	<u>£180,840</u>
Platelets	3803	3725	-2.1%	-0.5	<u>£13,898</u>
FFP	4397	4452	+1.3%	-4.0	<u>-£1,565</u>
Cryo	598	469	-21.6%	+4.2	£4,080
Total cost reduction					<u>£197,253</u>



Summary

- “ Electronic ordering takes time to set up
- “ Adapting your ways of working in the lab also takes time
- “ You probably won't get it right first time
- “ The time/effort is worth it in the end
- “ Can see benefits/efficiencies you probably didn't expect!