

Development of a Blood Transfusion Knowledge Based Competency Assessment Scheme

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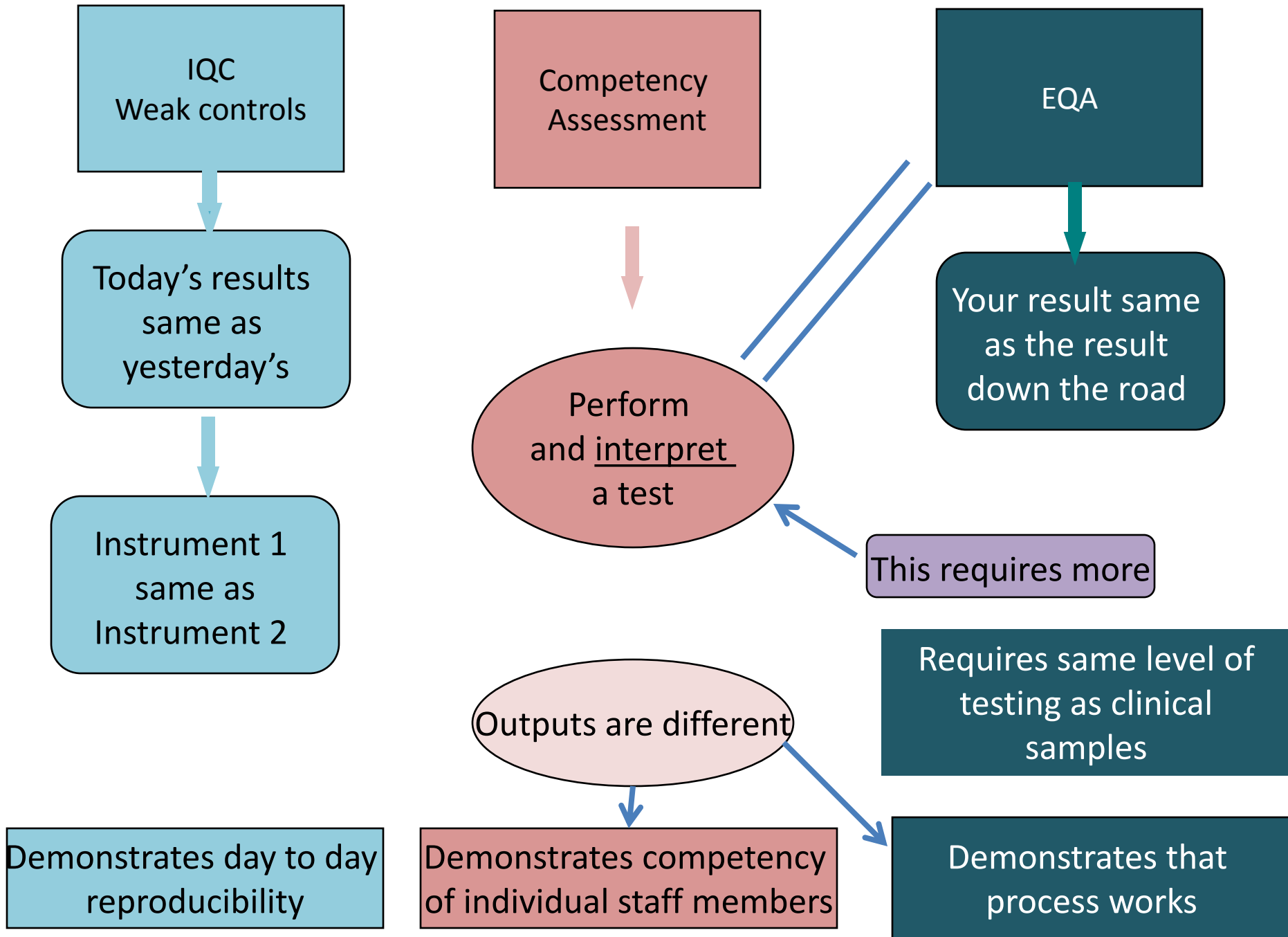
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Senior EQA Scientist

Why the perceived need?

(Mis)-use of EQA exercise material

- Additional EQA material is requested for repeat testing
- Labs want to 'buy' an extra set of material
- We phone labs with errors
 - 'several BMS staff did the EQA and we all got the same answer'



Why the perceived need?

Competence is more than practical ability

- **SHOT/EQA**
- Pathology Modernisation Programme
 - Creation of pathology networks
- Modernising Scientific Careers initiative
- HPC requirements
- Laboratory Collaborative recommendations
- BSQR's – the need to 'prove' competence***
- CPA

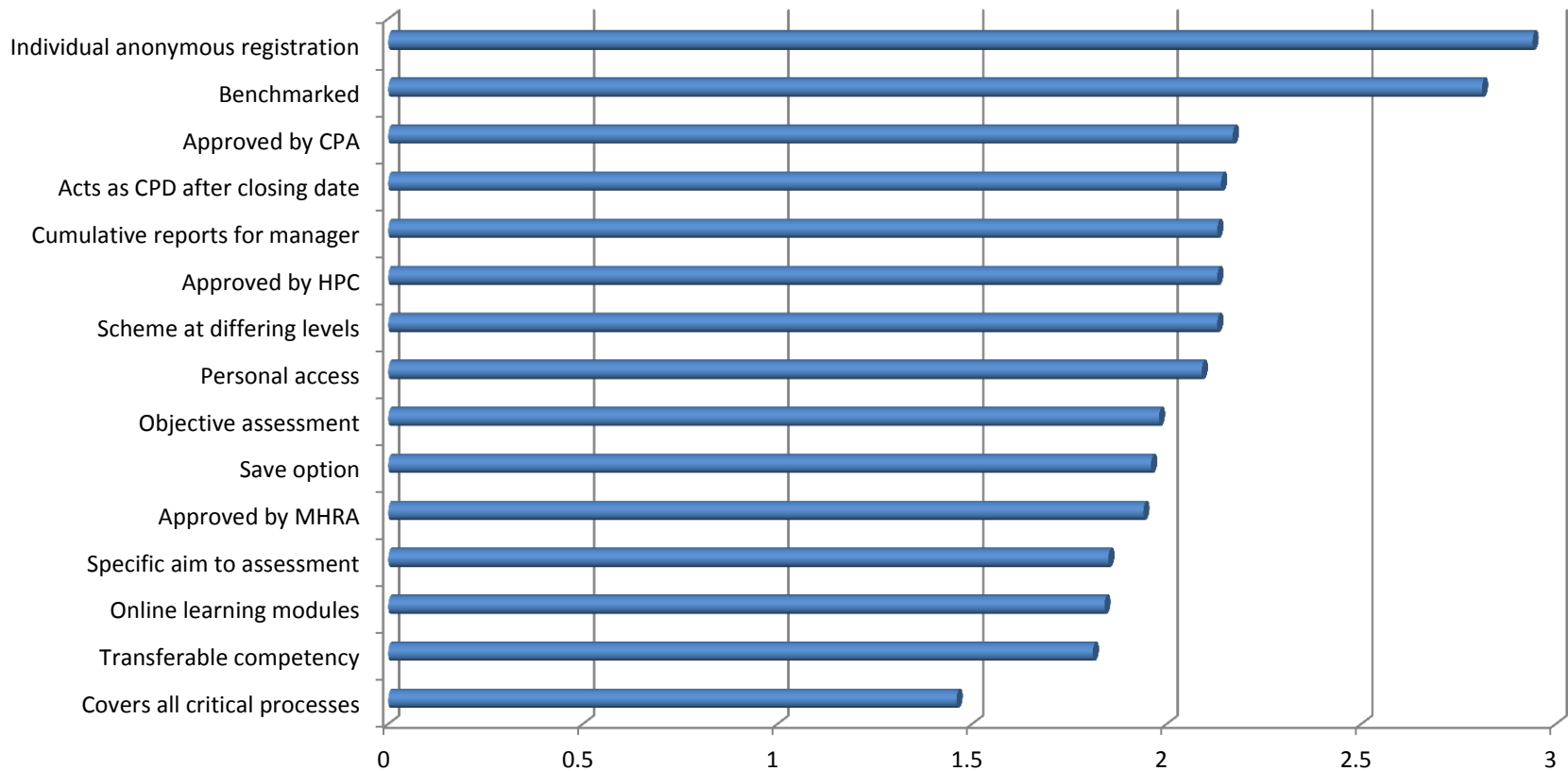
***MHRA ned assurances that any locally delivered competency scheme is robust and fullfils both practical and knowledge elements

‘Mind Mapping’ day outcomes

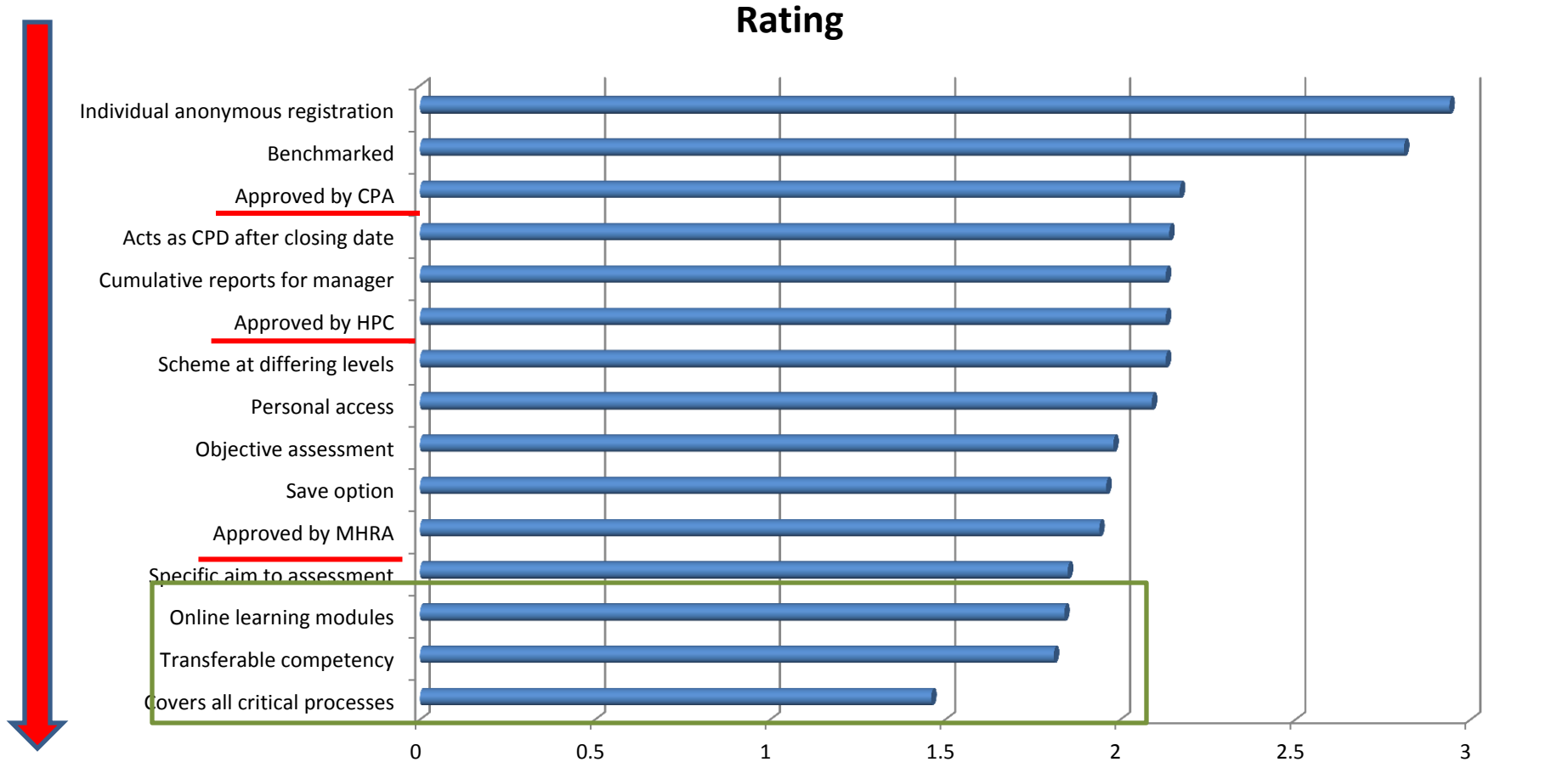
- Perception that many laboratories do not assess knowledge
- Deliver assessments to different levels to reflect differing needs of staff groups
- Assessments MUST be dynamic and reflect the critical processes within BT
- Assessments MUST enable managers to monitor ability of staff and so they can provide any necessary supplementary training
- Any scheme MUST meet current and future requirements as set by HPC, CPA, MHRA, IBMS, BBTS

Features rating

Rating

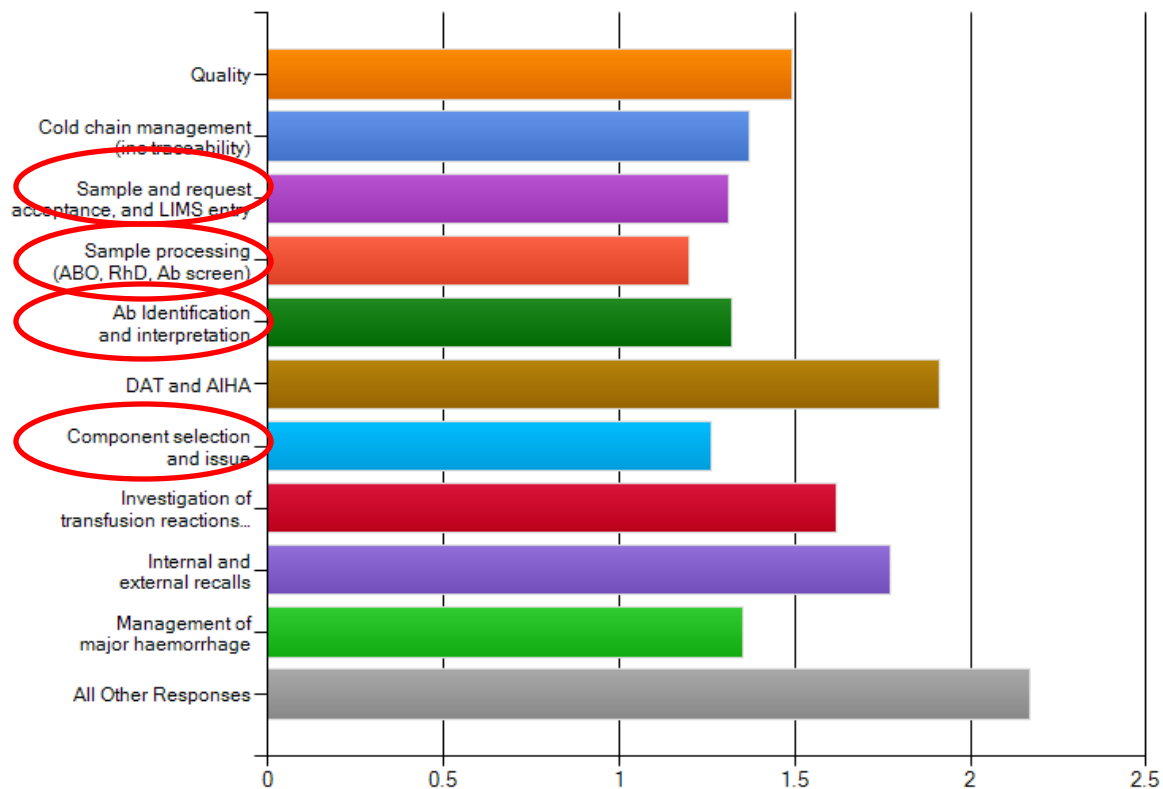


Features rating



Critical processes

In order to inform which critical processes should initially be included in any assessment scheme please complete the following table.



Participant survey outcomes – would you participate?

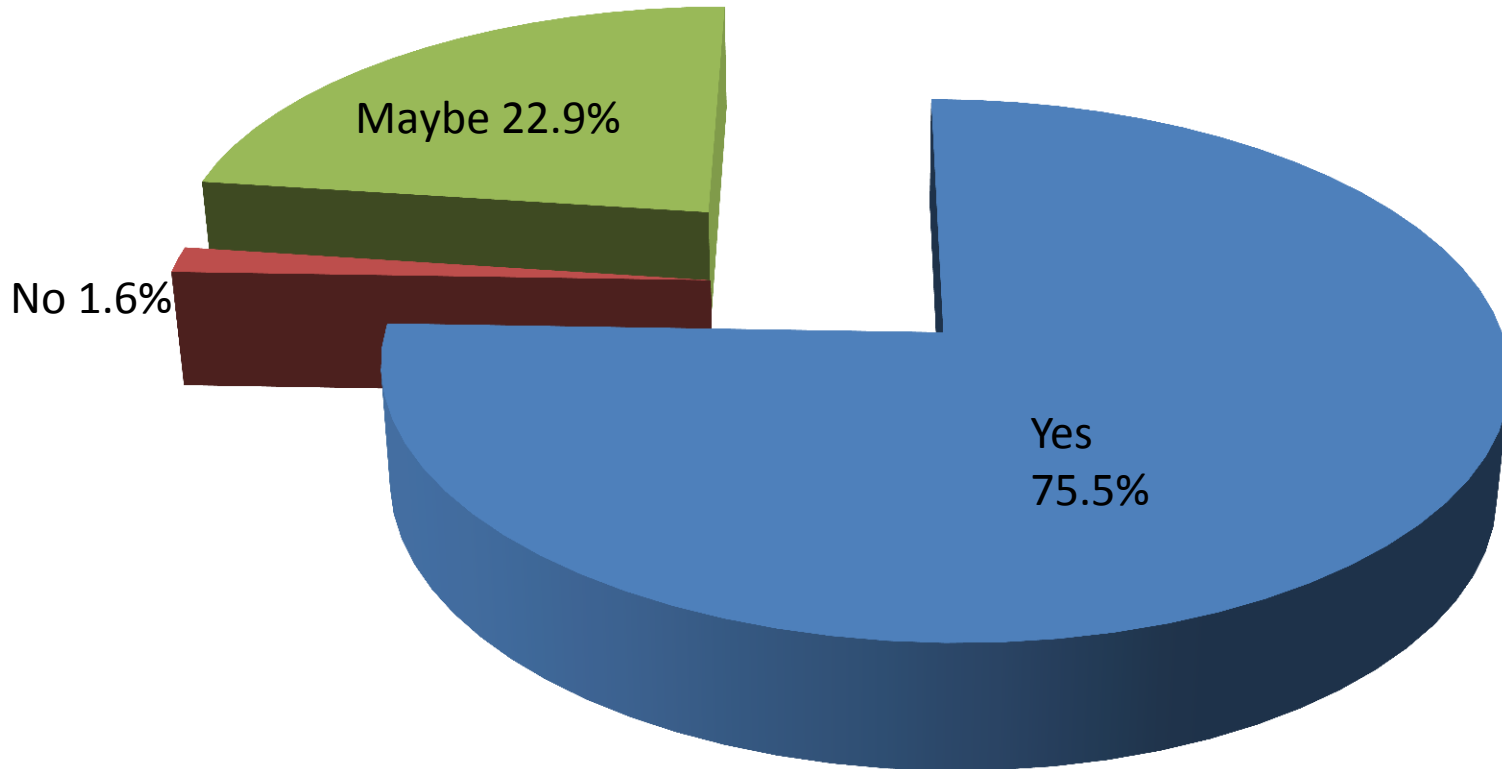
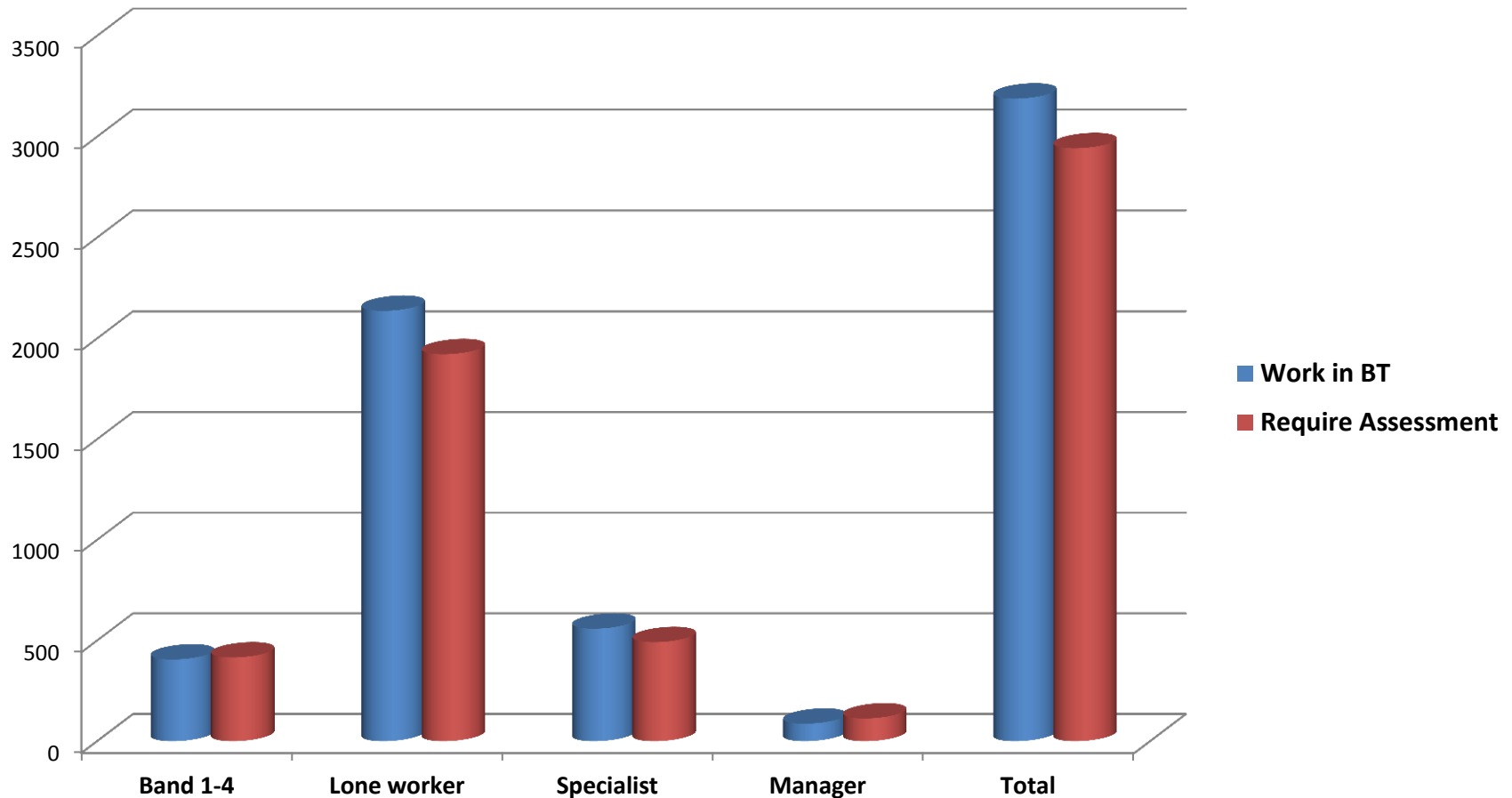
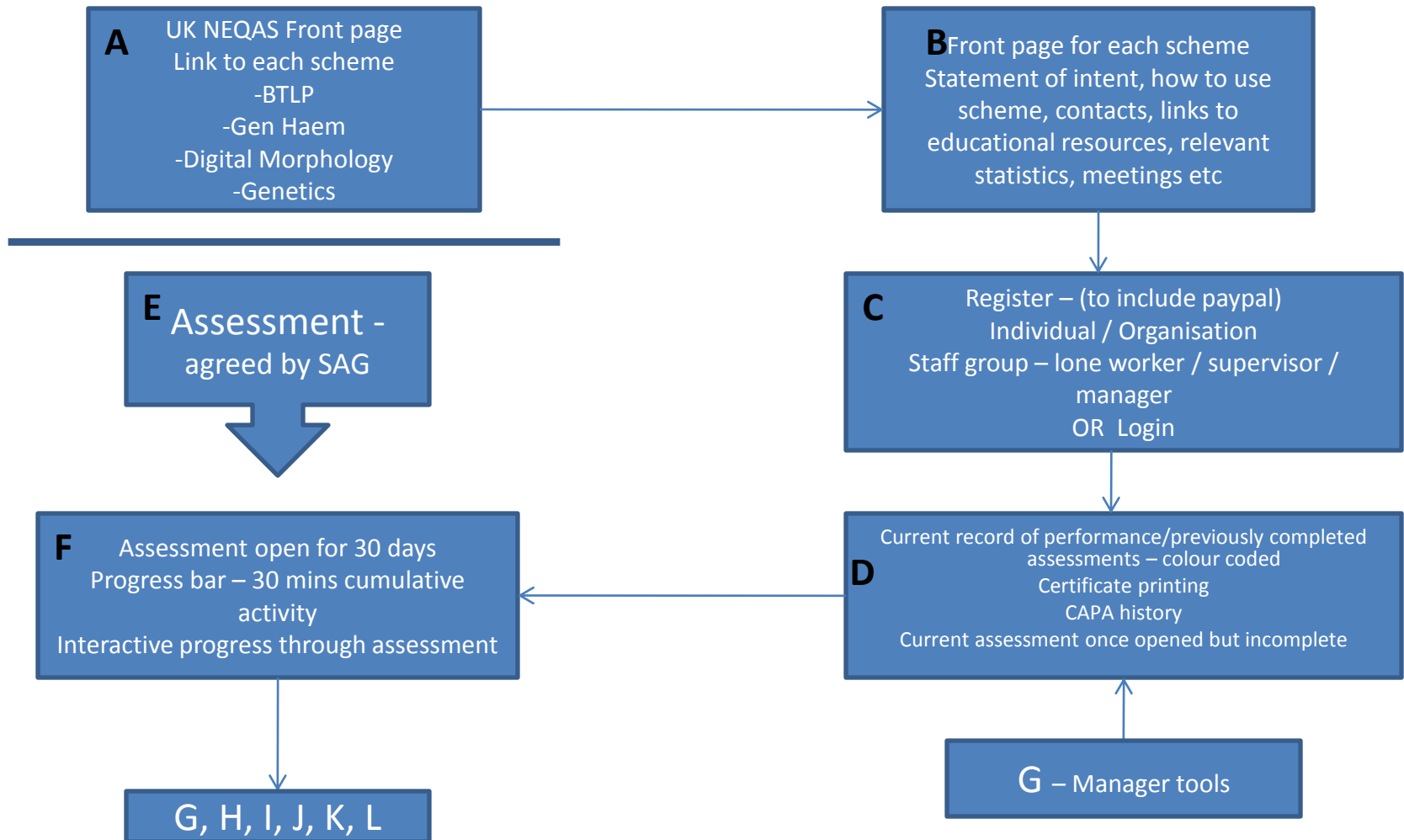


Fig 7 Would you participate in a UK NEQAS BTLP knowledge based competency assessment scheme? (n=188)

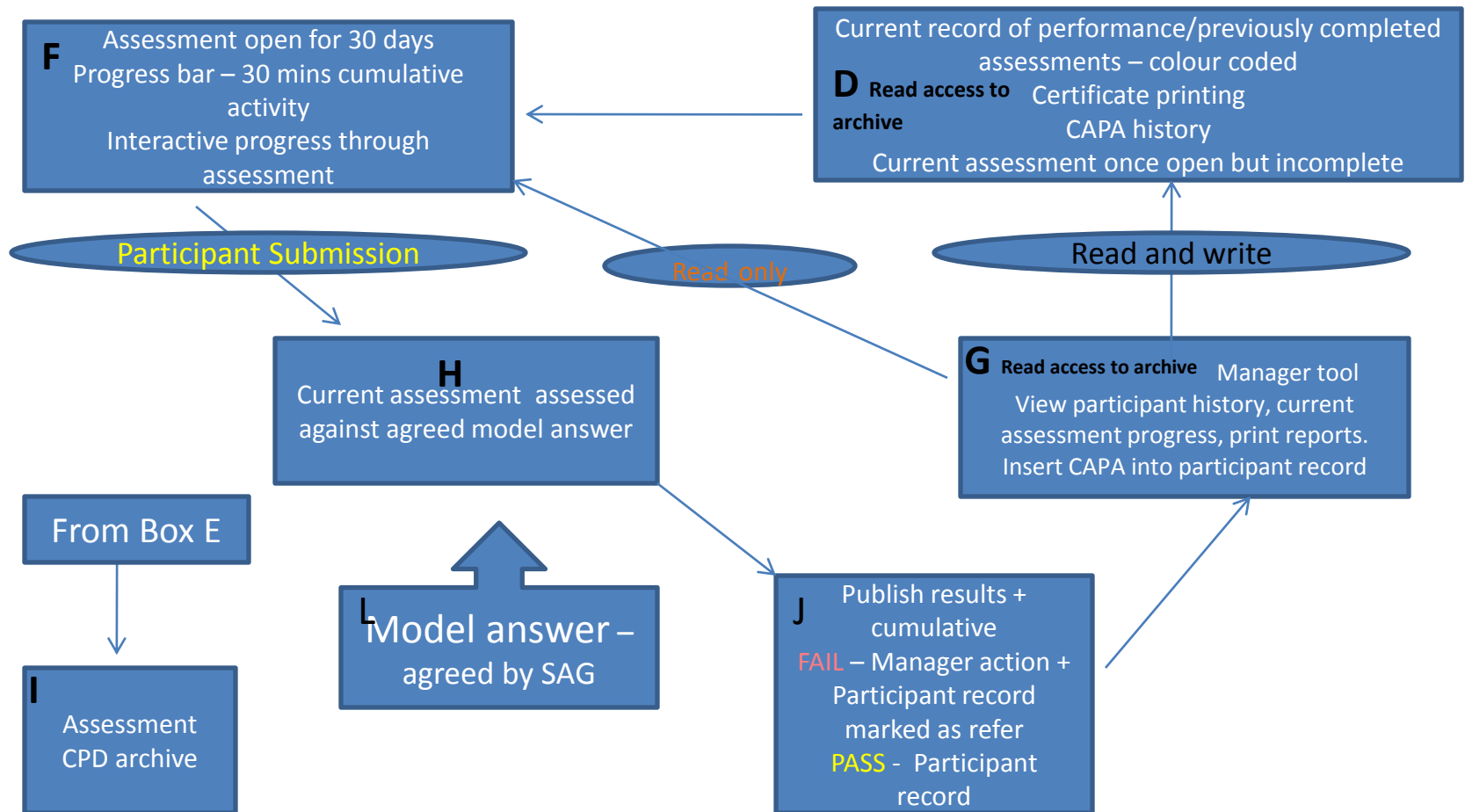
Participant survey outcomes – Numbers of staff needing assessment



Proposed schematic

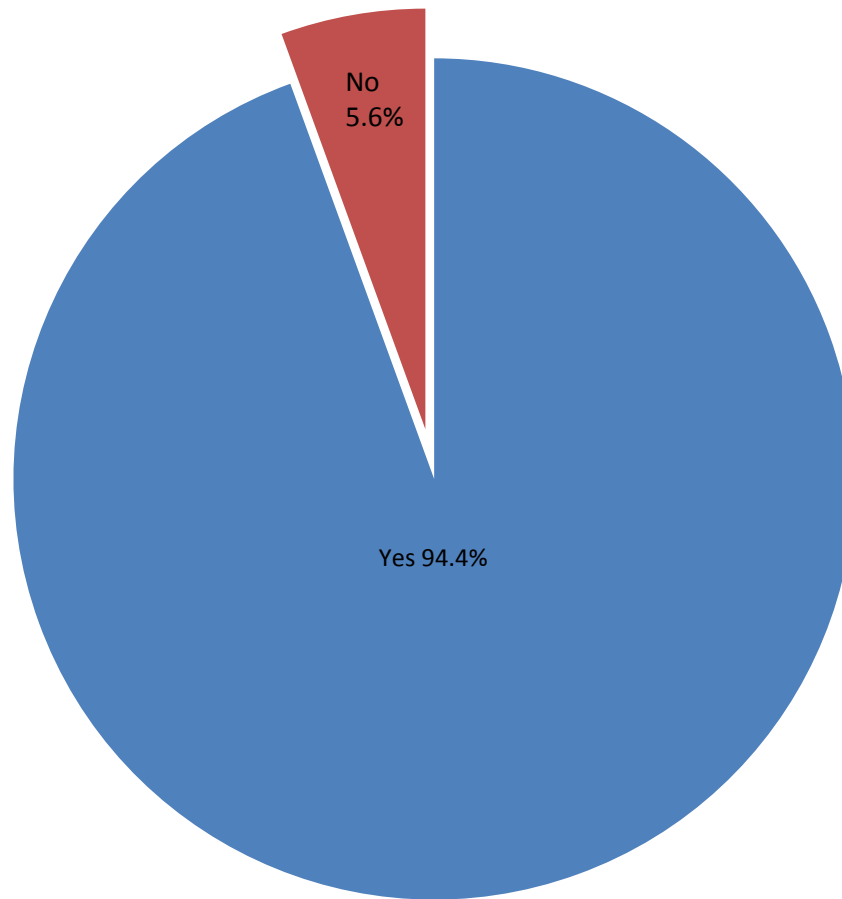


Proposed schematic

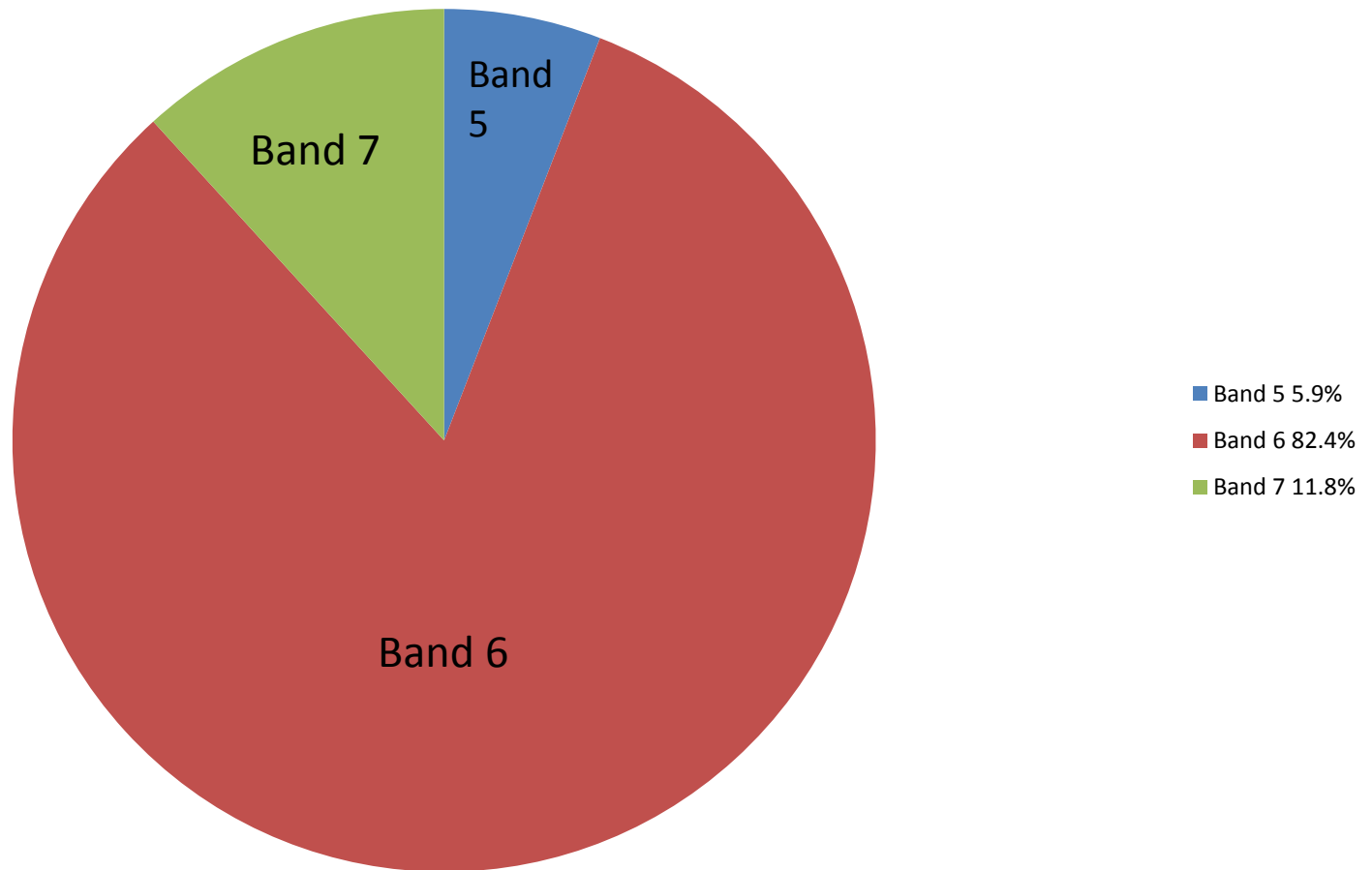


Pilot Exercise October 2012

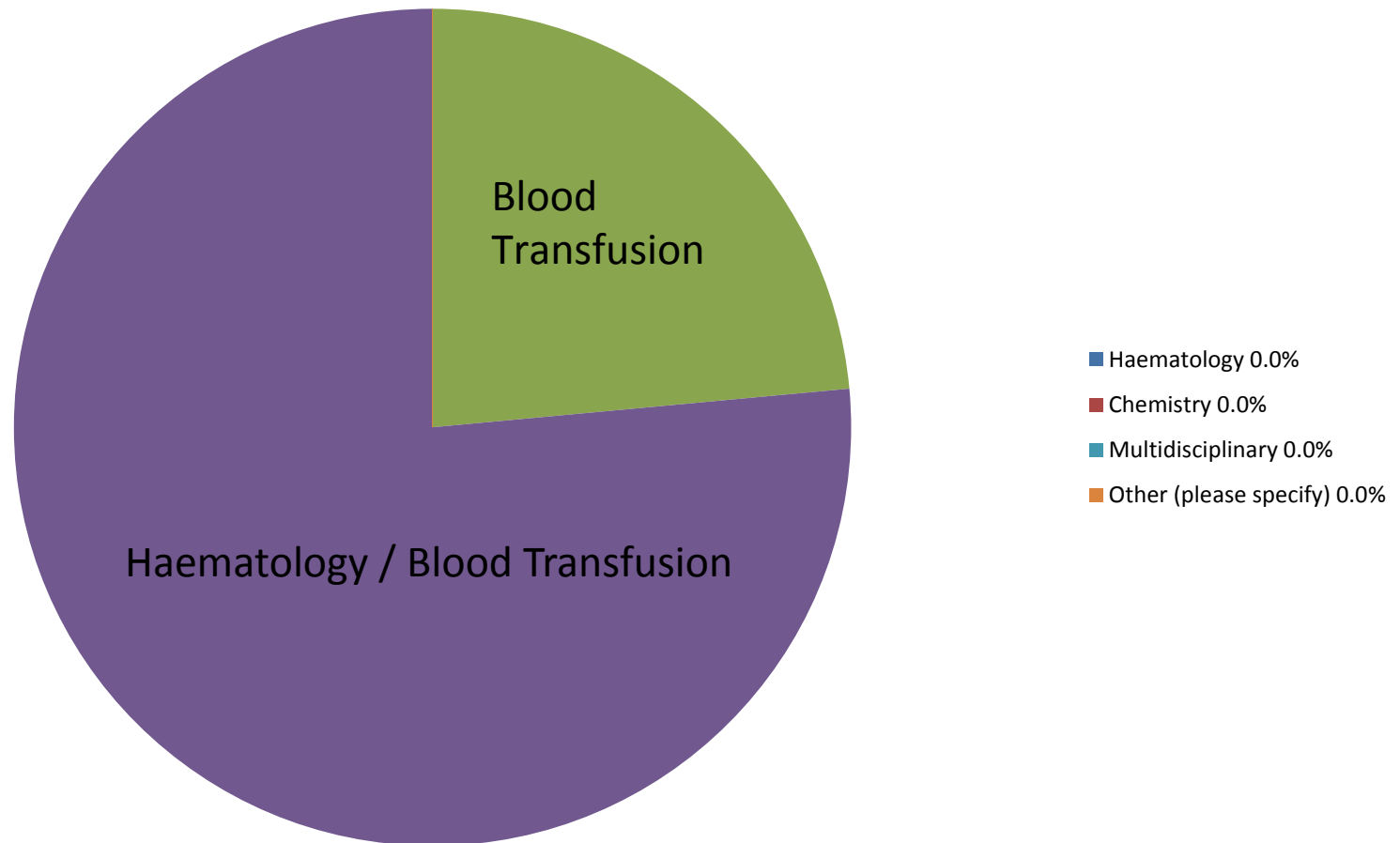
Are you band 5, 6 or 7?



Which A4C band are you?



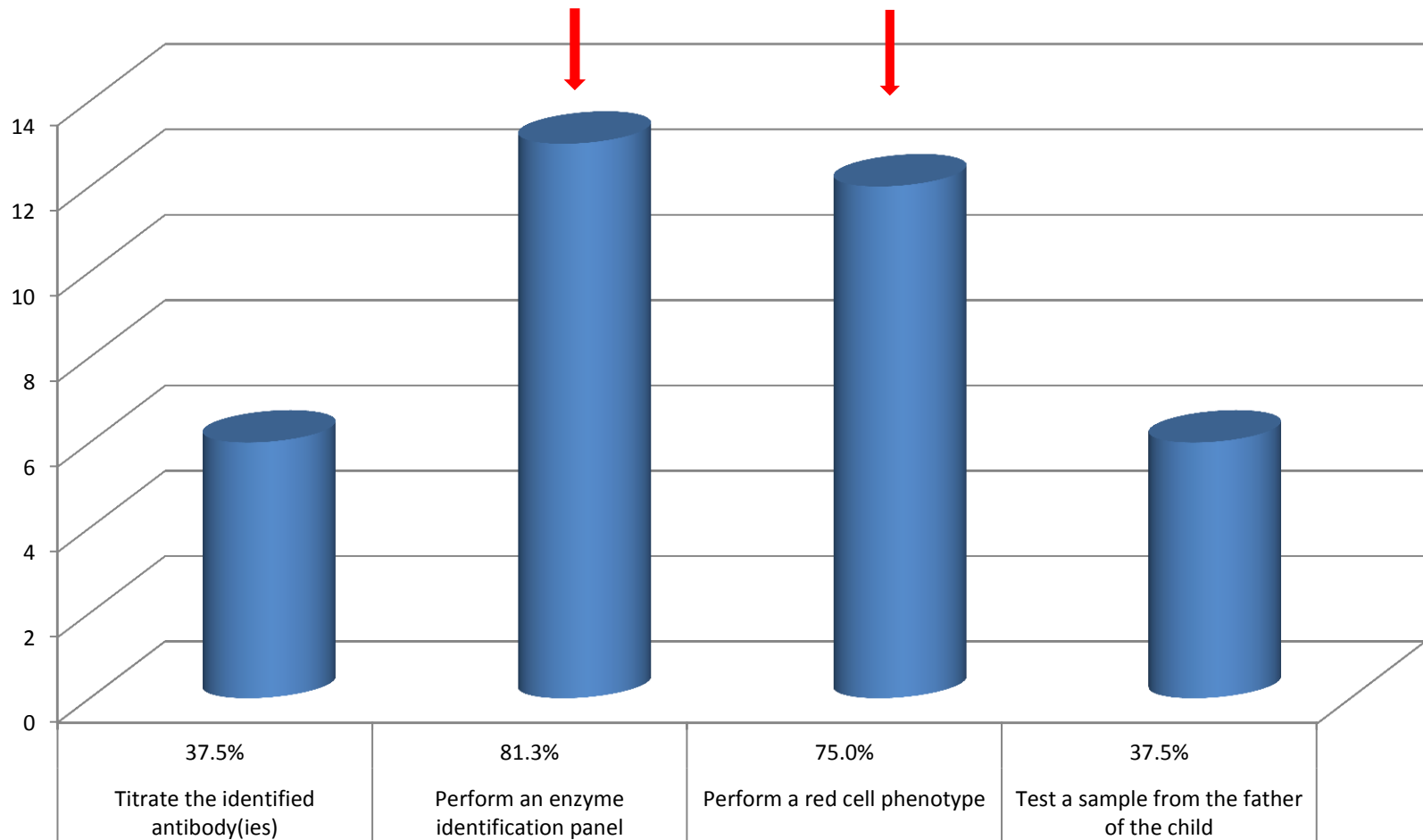
What is your 'specialist' area?



The scenario is

32 year old female JW presents at an antenatal clinic 12 weeks present. Routine blood tests show she is Group B RhD Negative with a positive IAT antibody screen. The IAT identification panel shows anti-Fya but anti-E cannot be excluded

What **immediate** further serological step(s) should you take to progress this investigation?



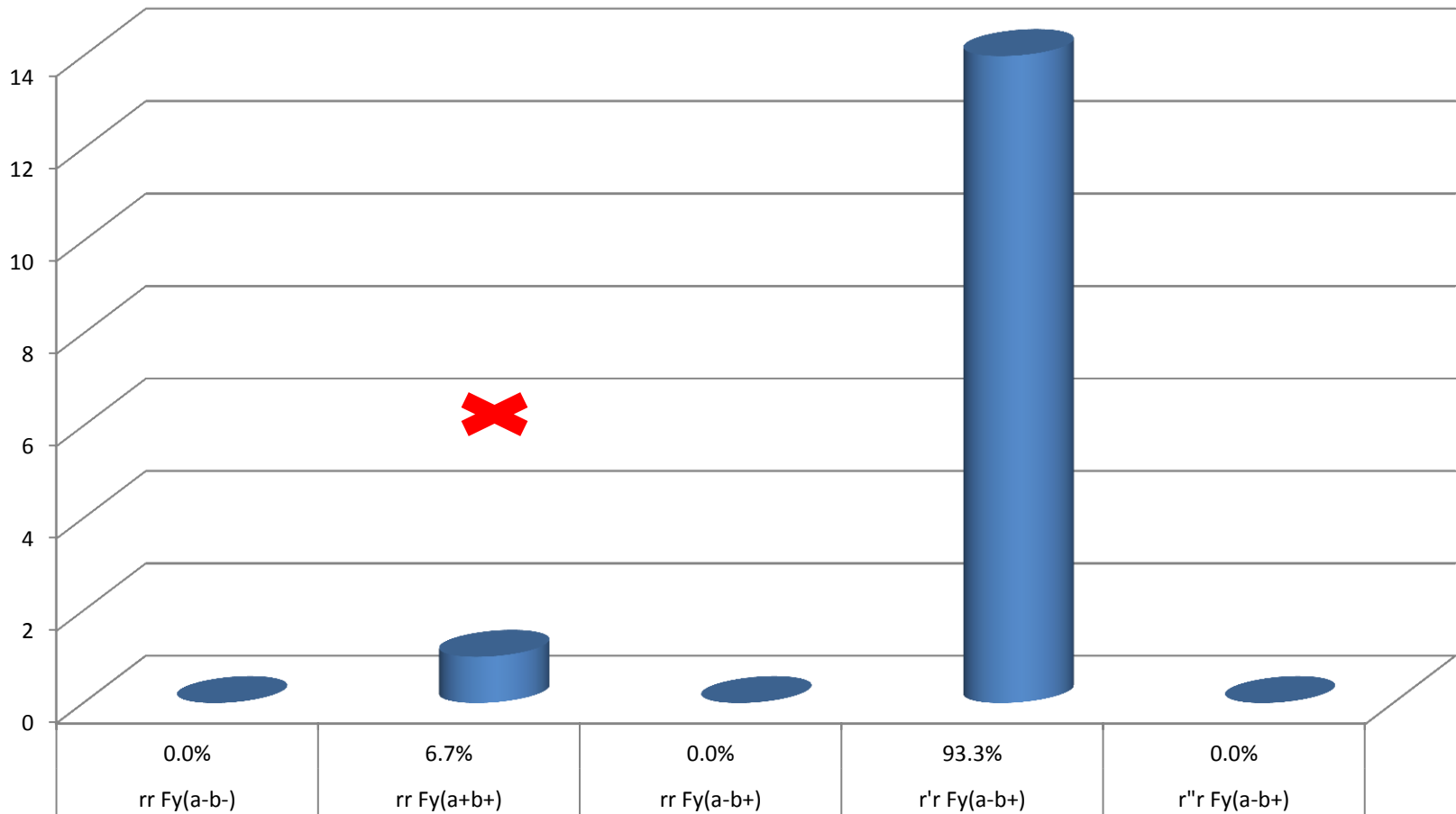
The evidence mounts.....

An enzyme panel is performed and confirms the presence of anti-E.

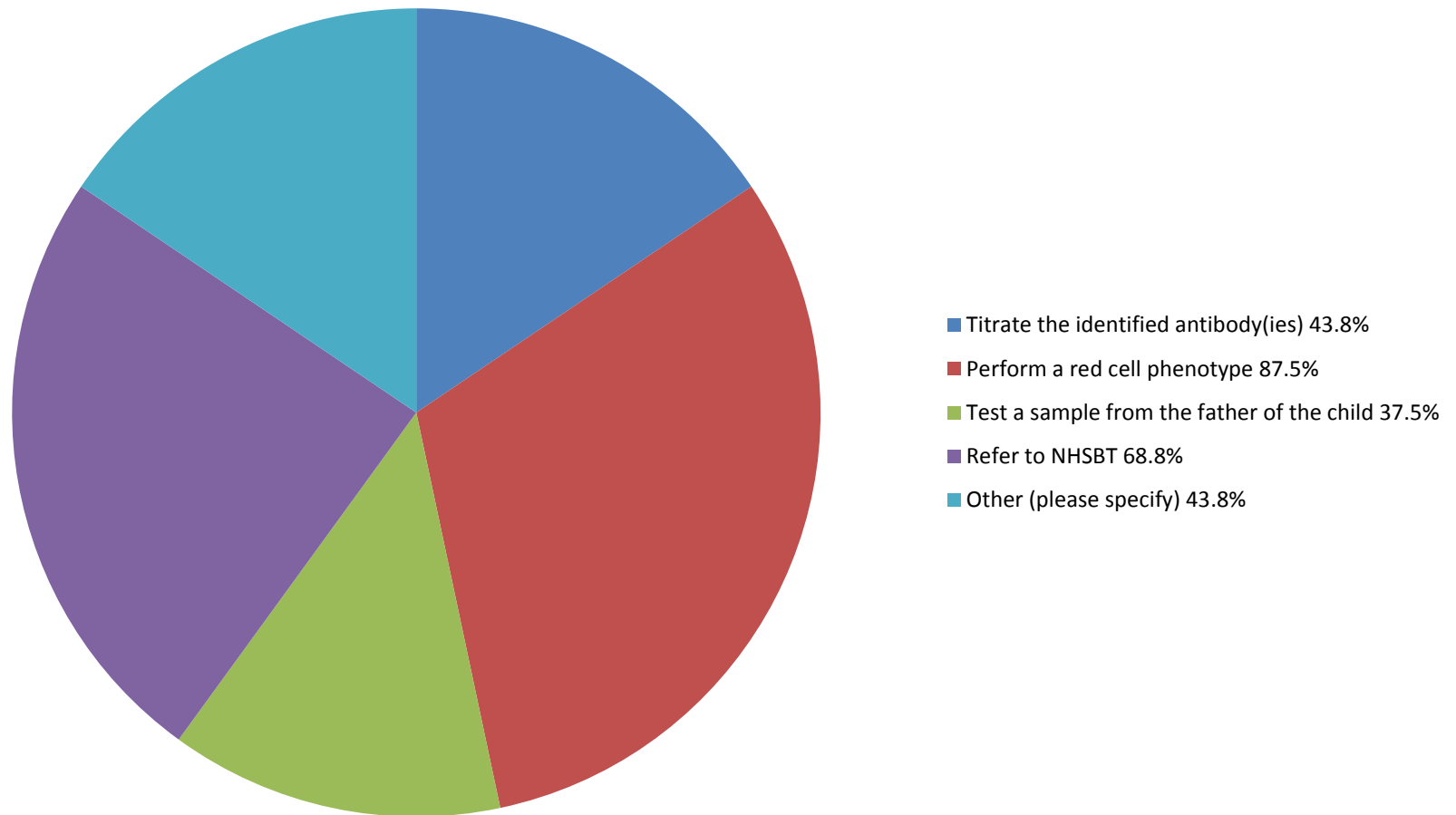
Results of red cell phenotyping are provided for interpretation

Anti-	JW	Pos	Neg
D	0	4	0
C	4	4	0
c	4	4	0
E	0	4	0
e	4	4	0
Fya	0	3	0
Fyb	3	3	0

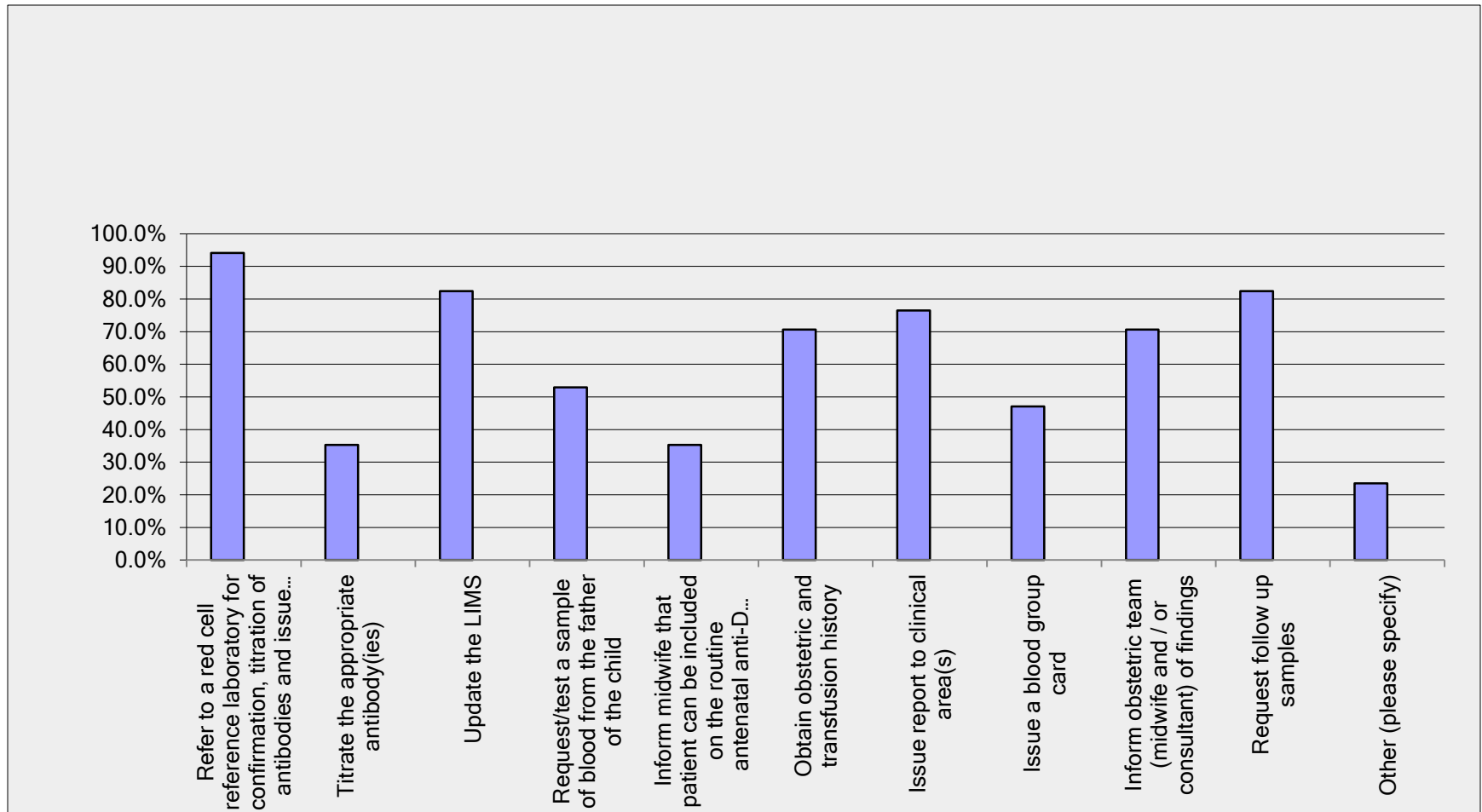
And the correct red cell genotype is...



What **immediate** further serological step(s) should you take to progress this investigation?



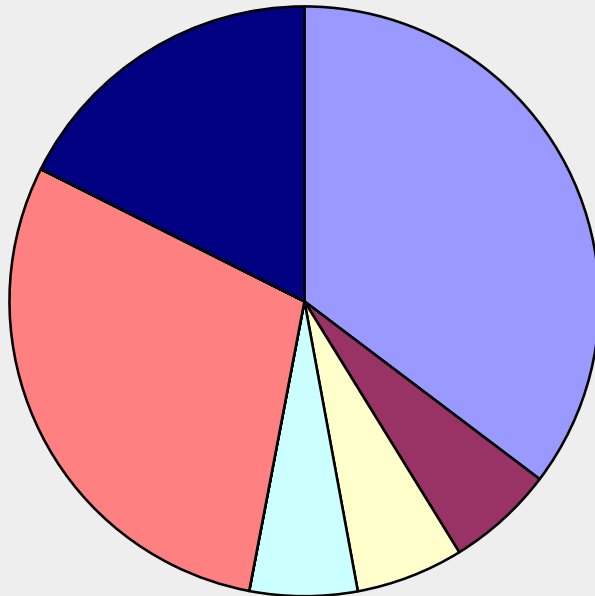
What further actions is it necessary to take?



Pregnant with anti-Fya and anti-E.

What are the essentials of your LIMS entry?

If the antibodies detected were anti-E and anti-Fya which of the following phrases best suits an entry that you would use when updating your local LIMS?




- ☐ Anti-E+Fya, select rr Fya neg, K neg, CMV negative blood for serological crossmatch
- ☐ Anti-E+Fya, select rr Fya neg, K neg blood for serological crossmatch
- ☐ Anti-E+Fya, select E neg, Fya neg blood for serological crossmatch
- ☐ Anti-E+Fya, select E neg, Fya neg, K neg blood for serological crossmatch
- ☐ Anti-E+Fya, select E neg, Fya neg, K neg blood for electronic issue
- ☐ Anti-E+Fya, select E neg, Fya neg, K neg, CMV neg blood for serological crossmatch
- ☐ Anti-E+Fya, select rr Fya negative, K negative, CMV negative blood for electronic issue
- ☐ Transcribe advice given on report from red cell reference laboratory
- ☐ Other (please specify)

All quiet until.....

At 30 weeks JW is admitted with a PV bleed. JW has received 1500iu immunoglobulin anti-D prophylactically at 28weeks. Initial Blood group, antibody screen and ID investigations suggest anti-D detectable in addition to the previously identified anti-Fya plus anti-E.

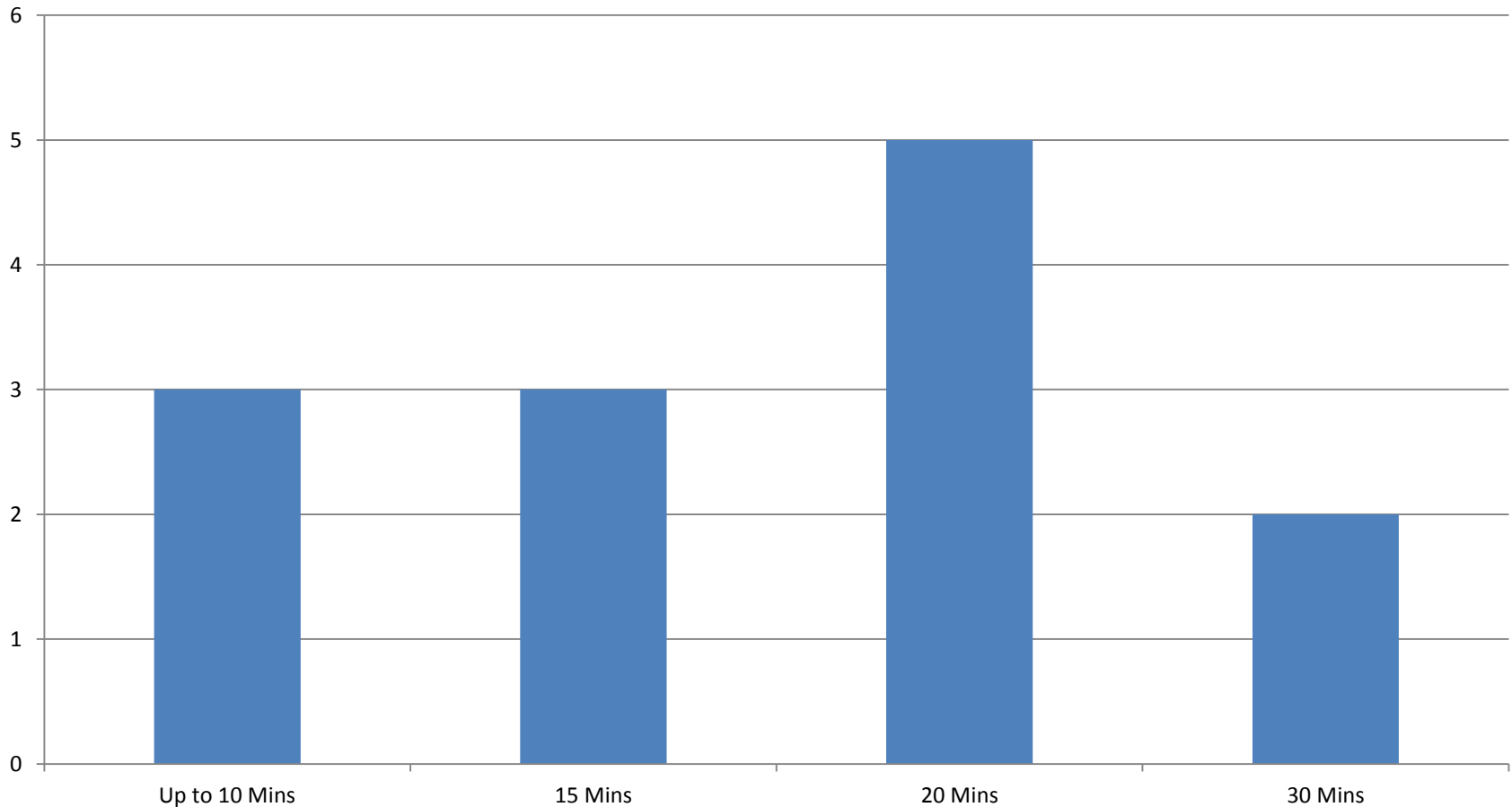
What further actions should be taken?

What our panel said.....

➤ Update LIMS	-	50%
➤ Issue 500iu prophylactic anti-D	-	50%
➤ Request /perform kleihauer	-	0% 
➤ Request full history	-	44%
➤ Refer to reference laboratory	-	44%
➤ Other**	-	63%

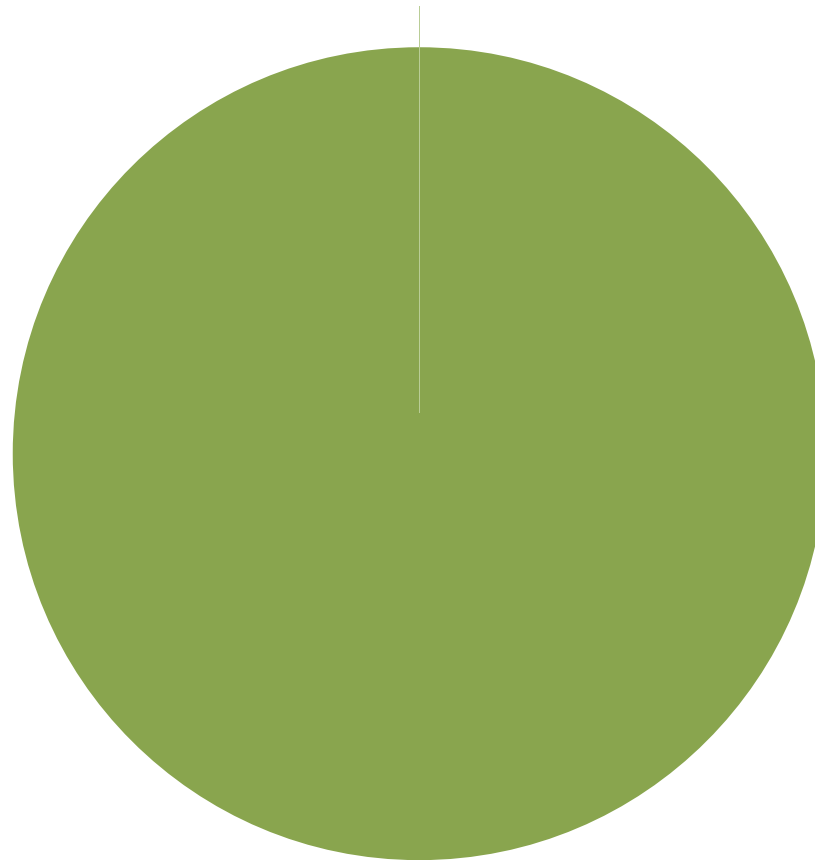
** update LIMS according to guidelines, **report anti-D as prophylactic !!**

How long did it take to complete?



Suitable for 'lone' workers?

(as judged by bands 5,6 and 7 staff)







100%
- YES

IT Specification

- Independent IT consultancy firm advise on way forward.
- Discussion with current UK NEQAS software providers
- Initial 'minor' projects to shape tender specification document

Timescale

- 2 year pilot project 
- Survey Monkey pilot in autumn 2012 
- IT pilot by mid 2013
- Lone workers first
- No fee during the pilot 
- Feedback from participants 
- Volunteer labs wanted for extended pilot exercise(s).

Acknowledgements

Thanks to our panel of experts:

- Dan Pelling – Morphology lead UK NEQAS General Haematology (ex training co-ordinator Imperial)
- Carol Cantwell – Tx lab manager, St Mary's Paddington
- Helen Barber – tx lab manager, Barnet – Past SC Chair
- Matt Ginger – WGH Snr BMS
- Anna Capps-Jenner - Ealing, TDL