### UKTLC/NBTC SURVEY 2015 KEY FINDINGS

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### **Summary:**

- 1. Laboratory reorganisations have been/are substantial, 100/178 (56%) laboratories affected.
- 2. Information about staff leaving demonstrates that the largest number have been made redundant together with a number of early retirements. These may be related to mergers.
- 3. There are staff shortages with dependence on locum and agency staff. Vacancies have been present in some laboratories for significant periods of time. The highest number of vacancies are for Band 6 biomedical scientist (BMS) posts with many vacant for 2 or more years.
- 4. It has become more difficult to train and mentor staff, and resources for training are reducing.
- 5. Future staffing: 56 laboratories have one or more members of staff over the age of 60 years and about 140 have staff aged 50-69 years. As these members of staff retire much specialist knowledge will be lost.
- 6. Comments about changes in training with the advent of Modernising Scientific Careers (MSC) suggest that knowledge and competency at the time of qualification have changed so that newly appointed staff need extra training and supervision which may be difficult to provide.

**Method:** The survey was distributed from NEQAS to 327 Transfusion Laboratories to be answered on Wednesday 25<sup>th</sup> March in order to give a snapshot of one day in a hospital laboratory in line with the format of earlier UKTLC surveys (2011 and 2013).

The 2015 survey consisted of 90 questions. The questions were designed to enable comparison with data collected by UKTLC surveys in 2011 and 2013, with additional questions triggered by issues identified by the National Blood Transfusion Committee (NBTC).

The total number of responses was 204/327 (62%) in 2015. However, the overall data collected are fewer than anticipated by this number of replies since approximately 40 of these 204 respondents did not complete the questionnaire. These blank answers are recorded as 'unknown' or as 'no answer'. It is notable that towards the end of the questionnaire fewer questions were answered by approximately 120 reporters.

Response rates for earlier UKTLC surveys were:-

- 2013 188/304 (62%)
- 2011 162/322 (50%), however the number that were incomplete in each survey was not recorded. In 2015 an 'alert' email was sent to Laboratory Managers ahead of the survey circulation to ensure that reporters had all the relevant data to hand (and also to ensure time was set aside on the completion date).

### **RESULTS:**

157/204 (77%) responses were completed by the technical lead (144/162, 89% in 2011, 151/188, 80% in 2013).

118/204 (58%) of these were Band 8 biomedical scientists (BMS), 68/204 (33%) were Band 7, and 8/204 (4%) were Band 6.

When asked how many transfusion laboratories they were responsible for, 137/204 (67%) answered one, which is comparable to 128/188 (68%) in 2013. Interestingly in 2015 however, 11/204 technical leads were responsible for 4 or more laboratories compared to 41/188 responsible for 2, and 13/188 responsible for 3, and none for more than this in 2013 (Figure 1).

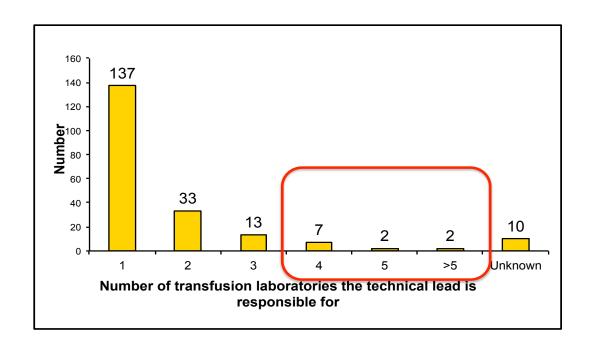
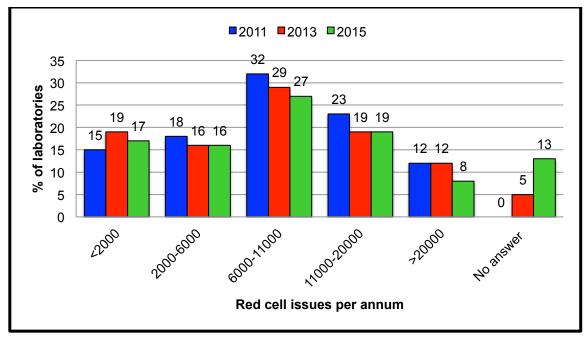


Figure 1: number of laboratories that the technical lead has responsibility for

### **WORKLOAD and STAFFING**

## Workload by number of red cells issued, and numbers of group and screen samples:

Figure 2: Red cells issued by laboratories per annum: % of laboratories in each group – to enable comparison between the three surveys, 2011, 2013, 2015. There appear to be lower percentages in the laboratories with greater red cell issues but interpretation is difficult as it is not clear where the 13% who did not answer this question in 2015 would sit. There does not appear to be much change in the number of group and screen samples over time.



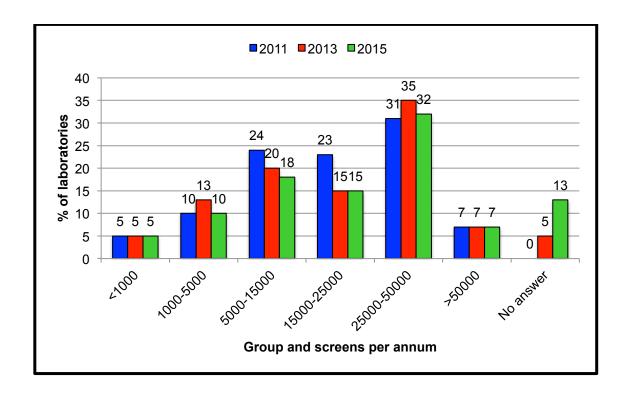


Figure 4: The numbers of staff in each grade working on day of survey (for example, 82 laboratories reported one band 8 BMS working on that day, and 7 had two; 15 laboratories had 4 band 6 BMS). Band 6 BMS were the most numerous.

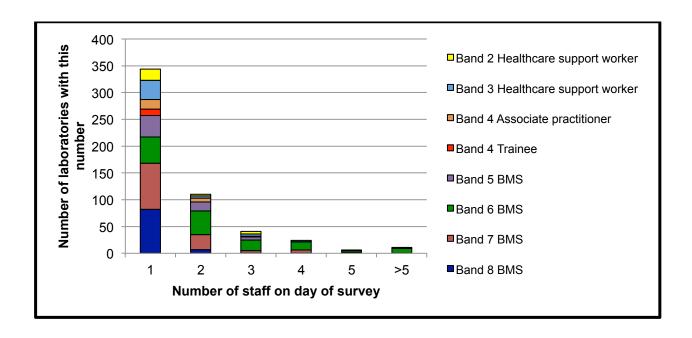


Figure 5: Target number of staff to be present at work in each grade on a 'normal' routine working day (Mon-Fri).

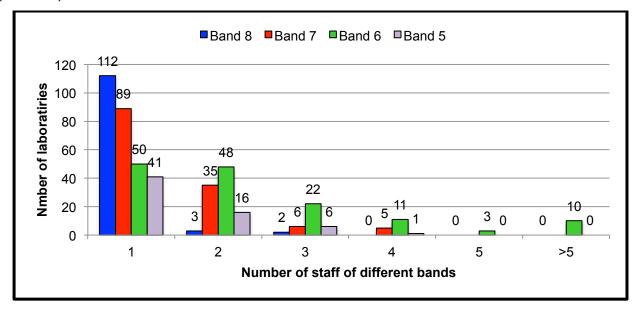


Figure 6: How often is the target number achieved?

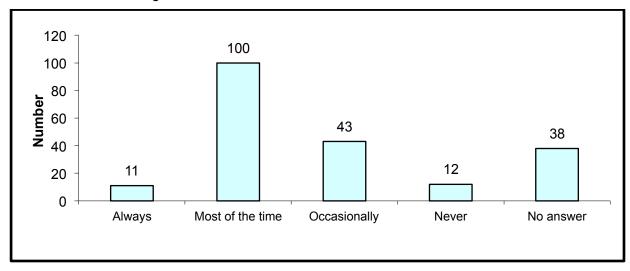
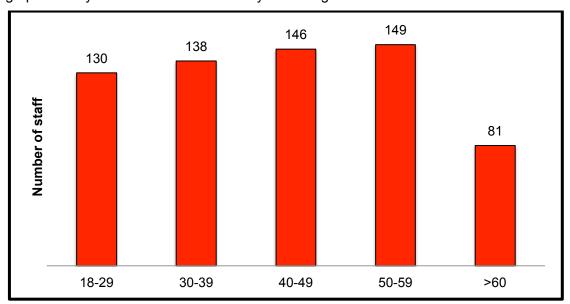


Figure 7: Age profile in years: 37% of staff are 50 years of age or older



Has there been a change in workload? 102/178 (57%) of laboratories who answered this question had noted an increase in workload compared to 2013.

Figure 8:How does current workload compare with 2013?

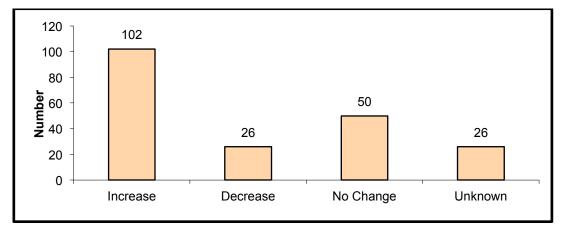


Figure 9: Laboratory workload, % change from May 2013

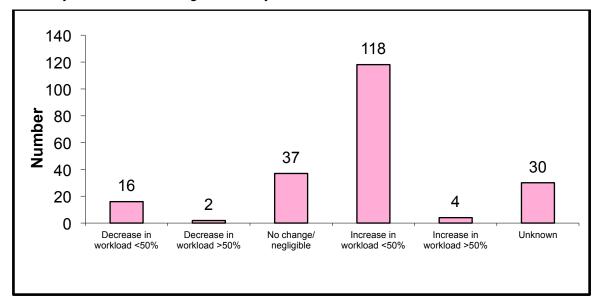


Figure 10: Training and mentoring: 123/178 (69%) who answered this question state it is more difficult to train/mentor inexperienced staff. The same question was asked in 2013, relating to the previous 5 years. At that time 86/129 (67%) noted it to be more difficult.

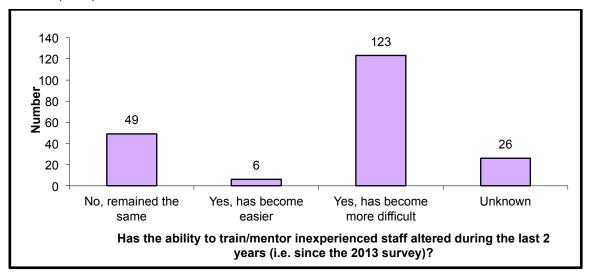


Figure 11: Does your laboratory have an identified training and development budget?

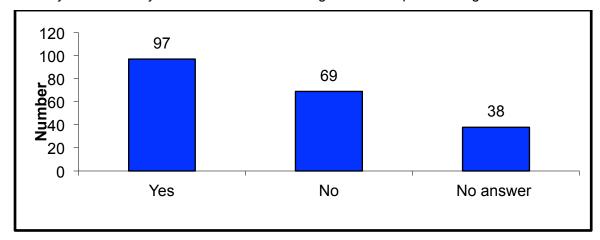
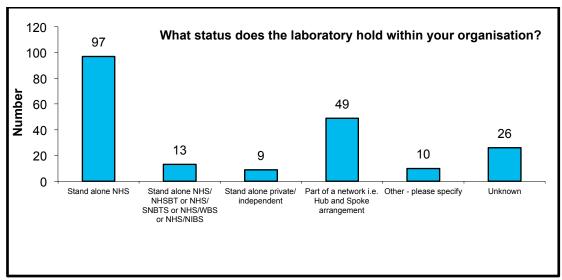
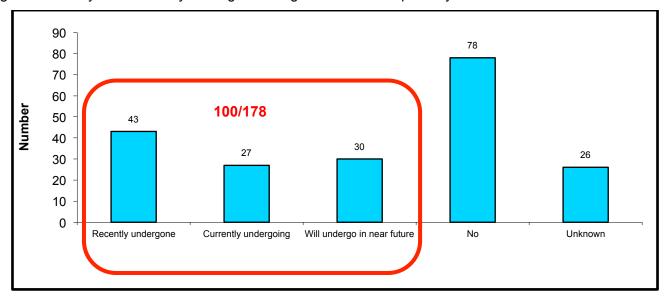


Figure 12: What status does the laboratory hold within your organisation? 49/178 (27.5%) who gave an answer state their laboratory is part of a 'hub and spoke' network; in 2013 it was 37/157 (24%). Stand alone NHS: 97/178 (54.5%) in 2015, and 91/157 (56%) in 2013.



Laboratory reorganisation was common with more than half in progress, expected or completed (100/178 – 56% of those who answered this question). We note that managing services through a change is very challenging. It would be useful to try and understand exactly what the reorganisations involved e.g. local blood science departments being introduced, multi site Trust changes, local networking or more extensive networking. Is the private sector becoming more involved in delivery of NHS services?

Figure 13: Has your laboratory undergone reorganisation in the past 2 years?



**Antenatal testing** was performed in 127 laboratories, not performed by 70 (7 no answer) with no significant change from 2013.

**Complex serology** is all performed within the laboratory by 9, all referred out by 39, and a mixture of the two by 140.

Staffing levels: Figure 14: does the laboratory have agreed staffing levels?

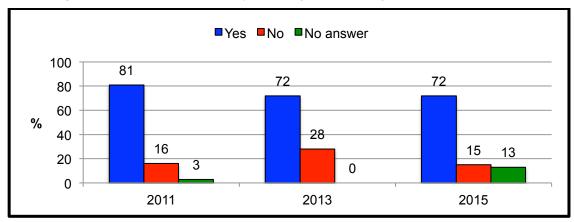
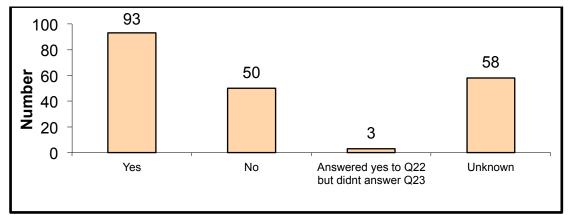


Figure 15:If yes, does the agreed staffing level facilitate attendance at educational events other than those that are statutory/mandatory?



Where the answer was 'no' the most common reason given was cost containment in 43. However, other answers were also given in 17 instances (so including some of the 'no answer'), particularly that staffing levels did not permit in several cases because there were not enough staff or multidisciplinary staffing.

**Status of the technical lead:** Figure 16: Agenda for Change Band (NHS staff) or title for non NHS organisations of the Blood Transfusion Laboratory technical Lead

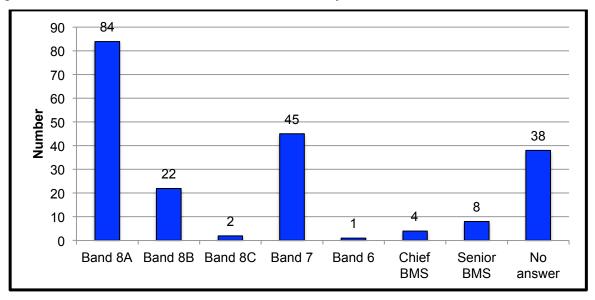
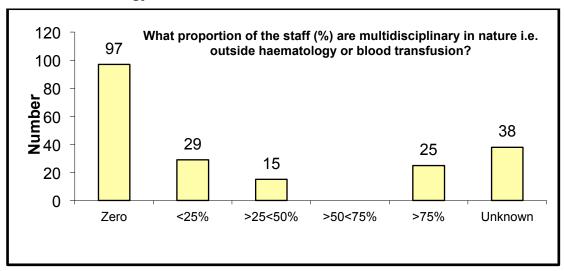


Figure 17: Non-haematology staff in transfusion:



Most of the staff from outside transfusion/haematology were based in biochemistry n=60 (but other areas included 13 from immunology, 5 microbiology, 3 virology, 1 cytopathology and 3 cellular pathology). In 137 laboratories there was no change from 2013, but in 25 there had been an increase in use of multidisciplinary staff, 8 had a decrease (39 no answer).

When aiming to appoint new HCPC staff many respondents (52/80 who answered, 65%) were not satisfied with the quality and number of applicants. The post of trainee BMS has been withdrawn and undergraduate training is generic to all specialties. A newly qualified Band 5 would therefore not have the same level of transfusion knowledge or laboratory experience as in the past.

When you advertise and interview for HCPC registered staff are you generally satisfied with					
	Yes	No	No answer		
The number of applicants	37	43	124		
The suitability of the applicants	58	23	123		
The calibre of applicants	28	<mark>52</mark>	123		

**Payment for out-of-hours work:** 101/160 respondents (63%) work from the agenda for change terms and conditions, 22/160 (14%) have local arrangements but are working towards agenda for change terms and conditions, 34/160 ((22%) have local arrangements, 3 have other arrangements (44 did not answer).

## **Training**

**1. Financial resources for staff education:** 166 answered the question on whether there was an identified training budget: 97 (58%) Yes, and 69 (42%) No, (38 others did not answer).

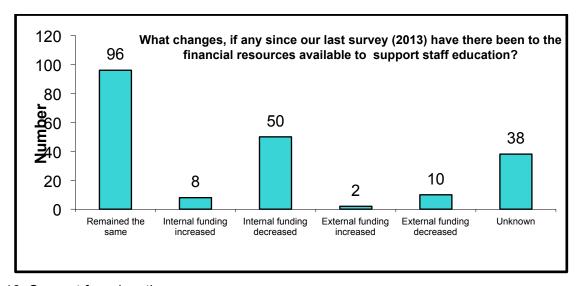


Figure 18: Support for education

The decreased internal funding numbers are worrying and supported by fact that majority of meetings attended are the so called 'free of charge' meetings. With the changes in training consequent on agenda for change there is a greater need for educational meetings. Staff may also require funding or support to obtain MSc qualifications once in post.

### 2. What meetings are attended?

NEQAS Annual meetings and RTC Educational days had the highest numbers of laboratory staff attending. These are either free or are included in the annual NEQAS subscription fee.

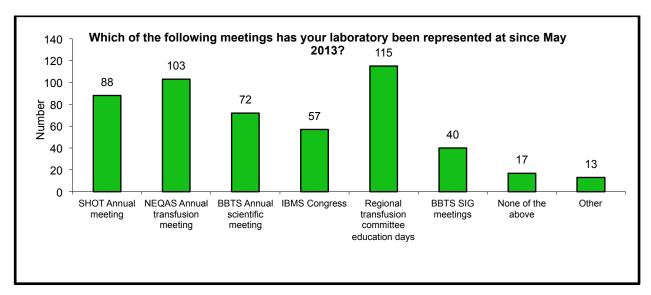


Figure 17: Meetings attended by laboratory staff

### 3. Locums and vacant posts

Locums: 44/164 (27%) of laboratories who answered the question had 1 to >3 locum staff in post to support blood transfusion staffing on the day of the survey. This number is an increase from 2013 when it was 13/135 (9%) – numbers only include those who answered the questions.

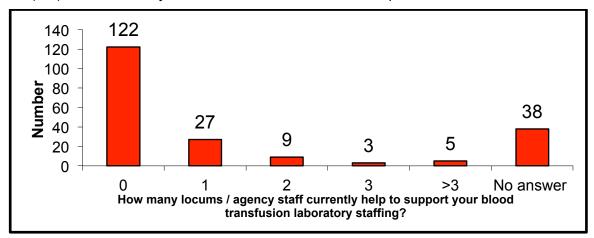


Figure 19: Locums and agency staff

**Vacant posts:** 90/166 (54%) of laboratories who answered the question stated they were carrying vacant posts which is an increase from 71/146 (49%) noted in 2013 and suggests that staffing shortages have not been addressed. Some of the posts at higher grades, bands 6, 7 and 8, have been vacant for years.

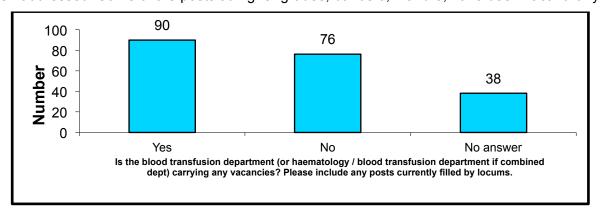


Figure 20: Vacant posts

Vacancies for both number of vacancies in each grade and the length of time posts have been vacant.							
Staff	< 6	>6<12	>12	1	2	3	>3
	months	months	months	yr	yrs	yrs	yrs
Blood transfusion technical lead	3	4		5			
Band 7 BMS	15	5	8	14	3	1	1
Band 6 BMS	25	18	12	11	16	8	8
Band 5 BMS	22	4	2	6	10	3	3
Band 4 Trainee	3				2		1
Band 4 Associate practitioner	4		1	3	2		
Band 3 Healthcare support worker	3	1	1	3	2		2
Band 2 Healthcare support worker	6	2		2			3
Clerical			1	1			
Transfusion Practitioner	1	1	1	1			
Clinical Scientist	1	1		1			
Consultant Haematologist with responsibility for transfusion	1		2		1		
laboratory services							

# Reasons for leaving posts:

The most common reason shown is redundancy affecting up to 5 posts. This is likely linked to mergers.

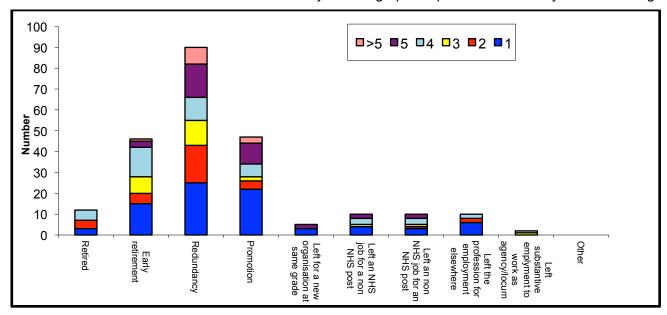


Figure 21: reasons for leaving

For staff leaving an NHS job for the same grade post in another NHS organisation, what were the main reasons for this? If not applicable enter N/A		
Poor promotion prospect	3	
Pay	1	
Personal reasons	5	
Location/Commute	45	
Gain experience	6	
Proposed changes/uncertainty of future in the laboratory	5	
Unhappy/ Shift patterns and work/life balance	13	
Lack of training	4	
Permanent post	2	
N/A	79	
Unknown	45	
TOTAL	208	

21/164 (13%) laboratories said they had had an MHRA inspection where staffing resources had been identified as a major non-compliance, 118 had not had this identified as a non-compliance, and 25 had never had an MHRA inspection.

## Workforce planning:

Every year Health Education England sends a Healthcare Science Workforce Forecast demand Planning document to the HR Dept of all Trusts and some Independent hospitals. Does your HR Dept involve you (or your Dept) in completing this document?			
Yes	5		
No	20		
Don't know	24		
I have never heard of this before	32		
No answer	123		
TOTAL	204		

## Implementation of the group check sample:

111/178 (62%) of laboratories have implemented the 2-sample recommendation (26 respondents did not know or did not answer this question). Most of the 67 laboratories that have not yet implemented this are in the process of implementation or reviewing with the local Hospital Transfusion Committee. However there were many comments about the difficulties implementing this, both financial and organisational. Clinicians had objected and concern was expressed about the possible impact on use of O D negative units. Other reasons given for not doing this included: waiting for advice from SCTAC in Scotland, concern over the financial implications, currently being reviewed, workload and rewriting of SOPs, staffing issues do not permit, responsibility is in the clinical area to get the right sample from the right patient and it was not required in some hospitals have a fully integrated IT identification system in place.

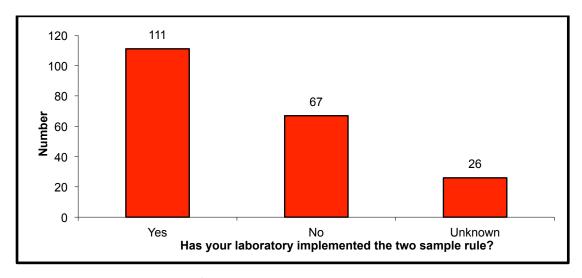


Figure 22: implementation of the 2-sample rule

#### **KNOWLEDGE & SKILLS**

Transfusion qualifications possessed by the lead answering the question:

Many transfusion leads are without higher level qualifications (approx 56%). The qualifications recommended in the UKTLC standards are shown in red. However, perhaps it could be argued that the older CPSM/IBMS qualifications might have more relevant experience than newer staff with the recommended qualifications.

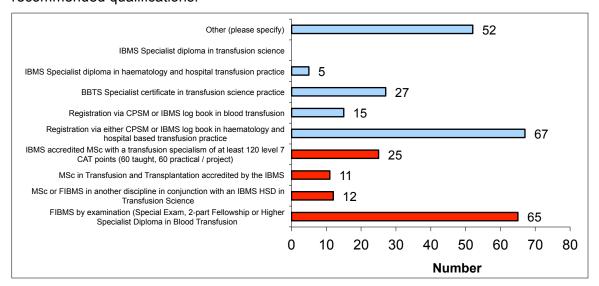


Figure 23: Qualifications possessed by transfusion lead

**Modernising Scientific Careers:** (the question was 'what statements most accurately reflect your knowledge and understanding of Modernising Scientific Careers (MSC)?) 34/96 (35%) respondents felt 'they knew very little about MSC and felt they need more support and information'. There were several comments on this question:

'We have had several STP and PTP students through the laboratory. It is not easy to find placements for them. The students are of little use to the laboratory whilst being trained, never here half the time and they finish up knowing very little about transfusion they are just generalists not fit for anyone discipline. MSC is a very poor programme. Trainees finish up with nice portfolios and not much understanding about anything.'

'MSC has made some BMS staff feel of 'less value' as MSC only recognises registration as clinical scientist. I have a BMS accepted for the HHCST program who has to jump through hoops to register as a clinical scientist before he can start the course, even though he is very experienced and heads up a specialist section. I do my best to ensure that non MSC BMS staff in my lab are supported to undertake MSc etc to ensure staff are treated equitably and professionally'.

When asked "What in your opinion is the main problem with seeking to employ supernumerary trainees, 52/101 (51%) answered they have no staff to train them, staff on shifts etc. Other comments included lack of finance/funding.

### Ability of newly registered BMS:

Most respondents felt that a newly registered BMS does not have an appropriate level of knowledge and understanding to work on Blood Transfusion, with better undergraduate and preregistration training being the most popular suggestions for improvement.

Do you feel that a newly HCPC registered BMS has an appropriate level of education (knowledge and understanding) to work in blood transfusion?		
Yes	22	
No	59	
No answer	123	
TOTAL	204	

How much time is it appropriate for the Transfusion Lead to spend at the bench? There is a wide range reported here, but at least some regular bench work is required to keep competency up to date. Is it therefore of concern that 27 do none, and 50 have less than 5 hours a week?

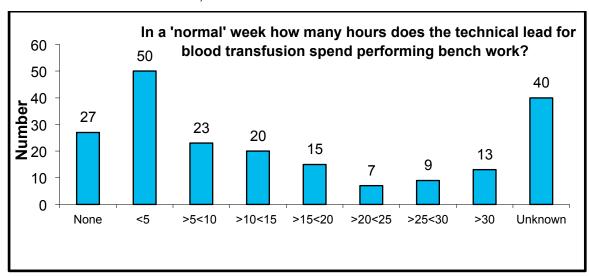


Figure 24: Time the lead BMS spends on bench work

Which description best fits the HCPC staff member(s) working last night? (tick more than one box if required i.e. where there was more than one HCPC registered member of staff working)			
N/A Do not provide an overnight service	5		
A permanent member of transfusion staff	18		
A member of staff rotating with other sections in haematology	108		
A multidisciplinary member of staff	26		
A permanent night worker	11		
No HCPC registered staff working last night	2		
TOTAL	170		

#### **Conclusions:**

These findings show considerable disruption with 100 laboratories experiencing re-organisation and many report increases in workload. There are staff shortages with dependence on locum and agency staff. Vacancies have been present in some laboratories for significant periods of time. It has become more difficult to train and mentor staff, and resources for training are reducing. Fifty-six laboratories have one or more members of staff over the age of 60 years and about 140 have staff aged 50-69 years. As these members of staff retire much specialist knowledge will be lost. Comments about changes in training with the advent of MSC suggest that knowledge and competency at the time of qualification are reducing.