



Hospital Laboratory Survey – T2024 Project S1

Transfusion knowledge gap analysis

January 2024

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- Hospital Transfusion Laboratory Survey for all staff working within Transfusion
- Sent to Laboratory managers
- Featured in the Update
- Personally sent to colleagues
- 241 Hospitals in England
- 64 Hospitals/45 Trusts responded
- 158 individual respondents
- Various grades of staff
- Average time to complete = 12 minutes
- Limitations – survey fatigue, not circulated to all staff as instructed, poor response rate (27%)



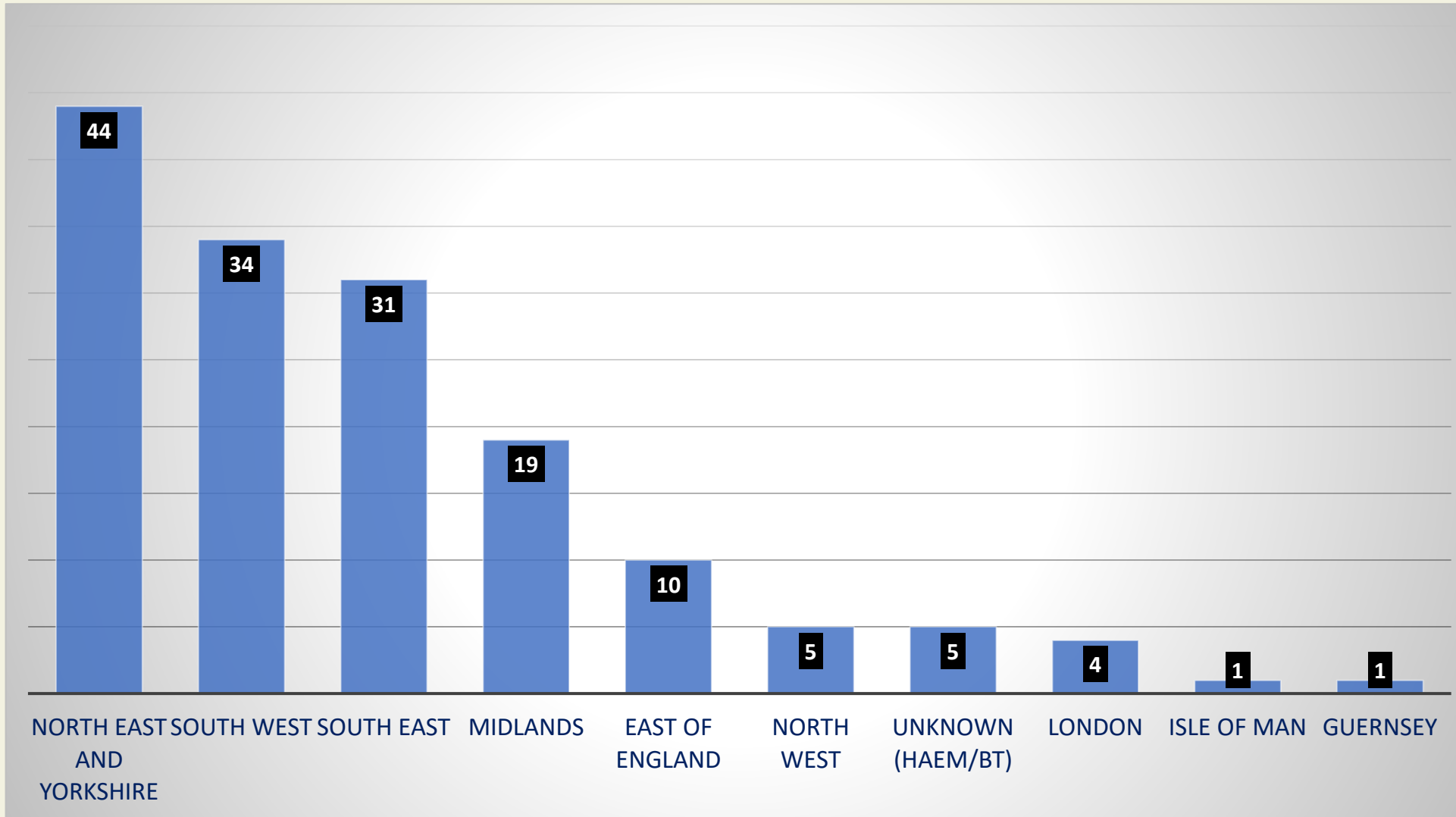
Survey responses per region



Blood and Transplant

Summary

- The highest response rate was from the **North-East and Yorkshire** (28%) region, lowest response rate was from the **London** region (3%).
- There were 5 responses answered as BT/Haematology and 4 unanswered.
- Also had 1 response each from IOM and Guernsey.



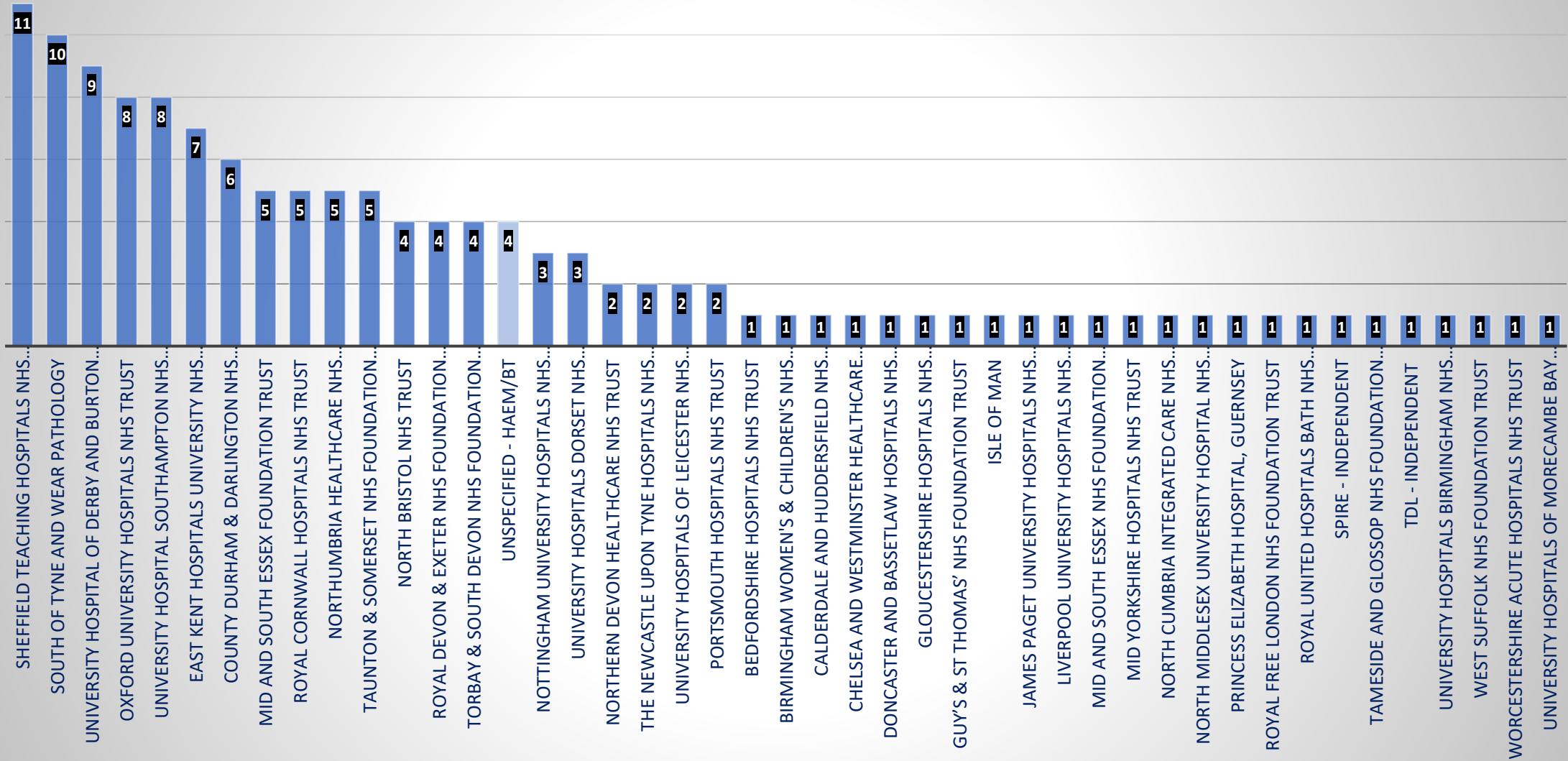


Q1. Please specify the Blood Transfusion Lab and Hospital site(s) where you work?



Blood and Transplant

Responses per Trust

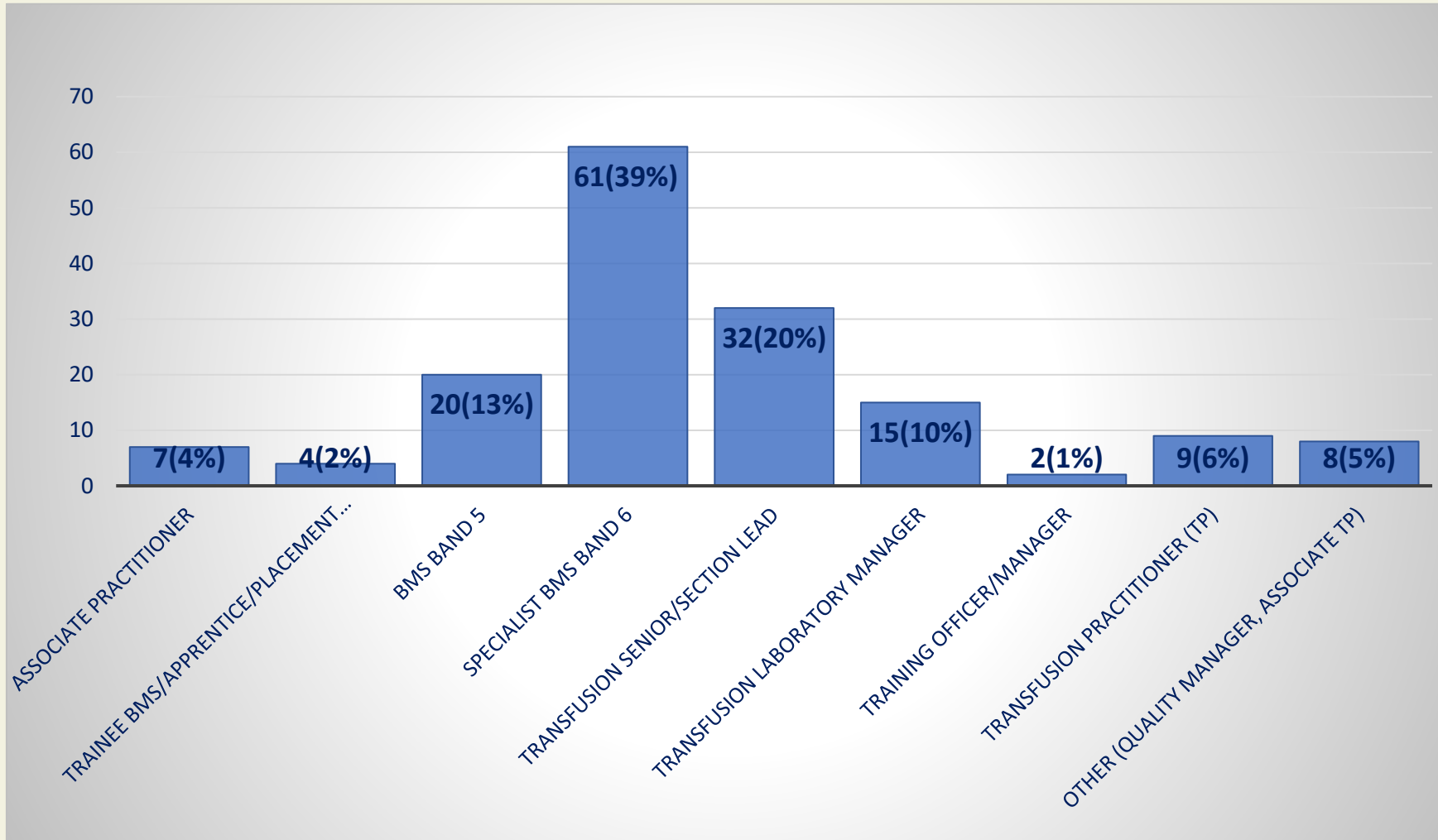




Q2. What is your job title?



Blood and Transplant



Summary

- 158 individual responses.
- Majority of responses were from Band 6 BMS (39%).
- Followed by Senior BMS/Section leads for BT (20%).
- Band 5 BMS's (13%).
- Transfusion lab managers (10%).
- 'Other' job titles included quality managers, support worker and associate transfusion practitioner.



Although this was a small number of respondents there was representation from various grades of staff/job titles.



Q3. How long have you worked in your current Transfusion department?

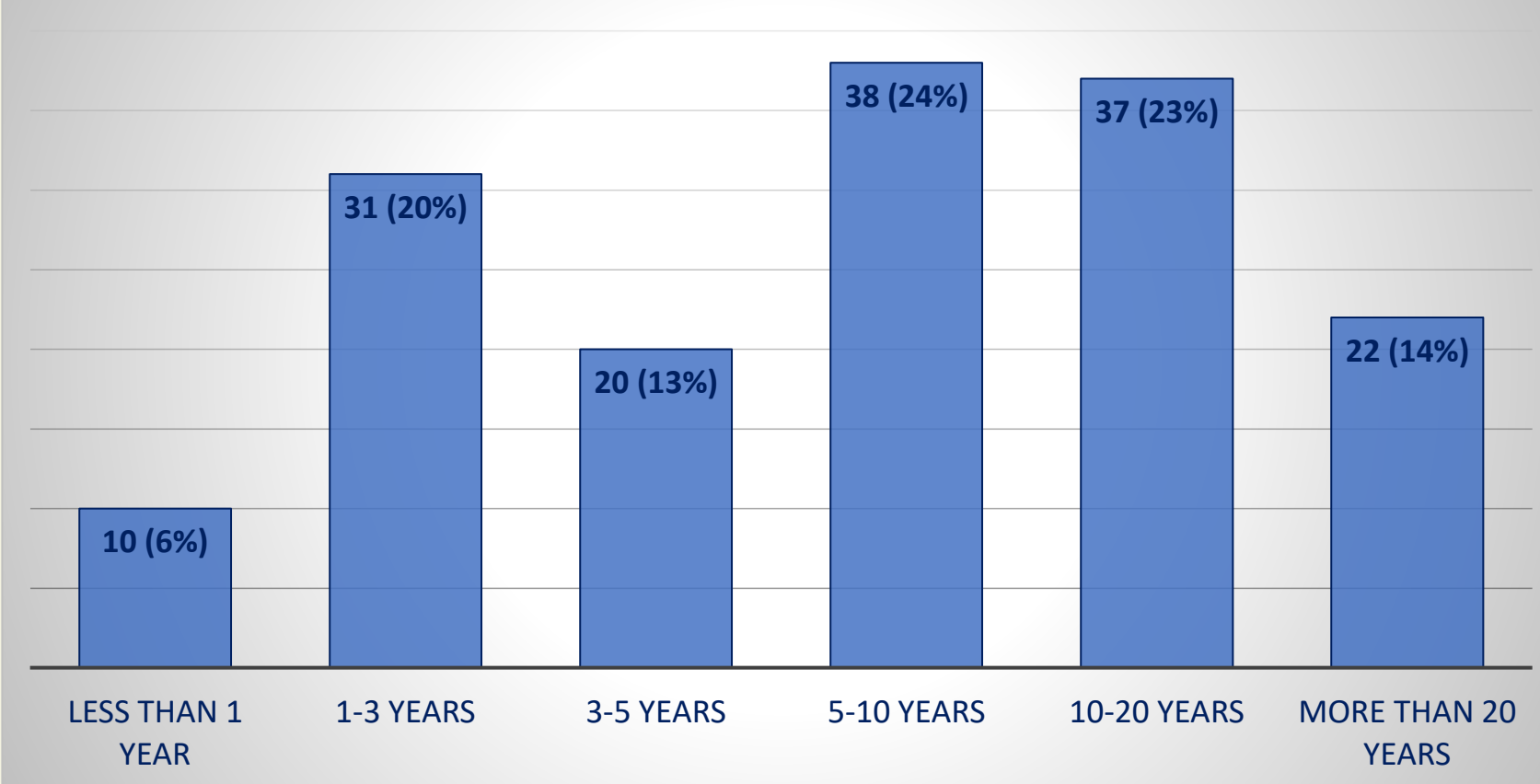


Blood and Transplant

Summary

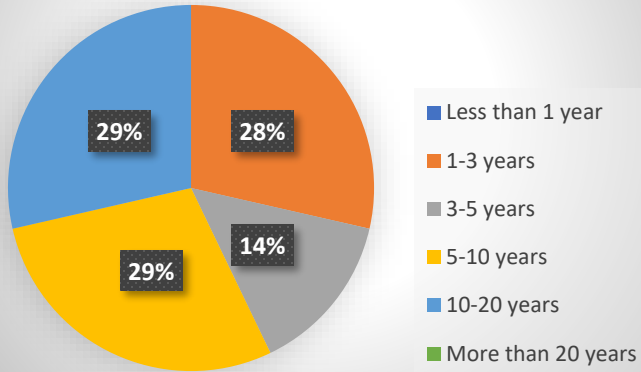
- **24%** of people had worked in their current Transfusion Laboratory for 5-10 years.
- This was followed **23%** of people working between 10-20 years.
- **20%** between 1-3 years.
- **14%** have worked in the same lab for over 20 years.
- Only **6%** had worked in their current lab for less than 1 year.
- Only **6%** had worked in their current lab for less than 1 year.

Length of time working in current Transfusion Laboratory

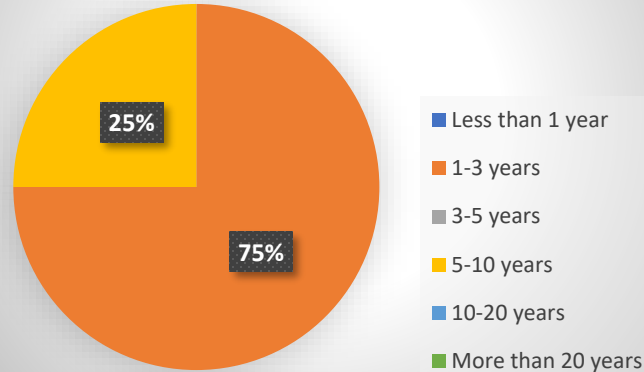


61% of staff had over 5-years experience in their current Transfusion lab. **6%** have worked in their current lab for <1 year.

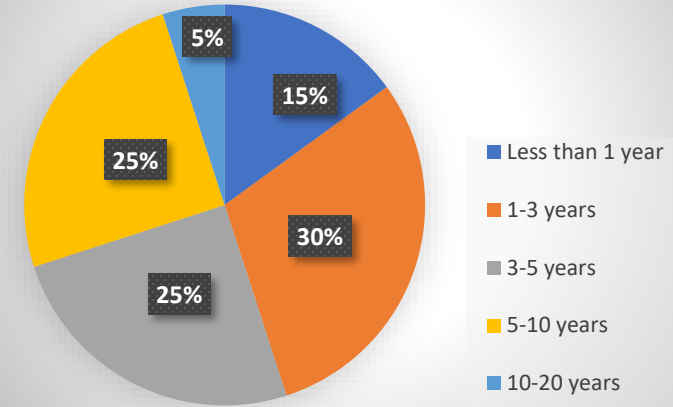
Associate Practitioner (Band 4)



Trainee BMS / Apprentice / Placement student



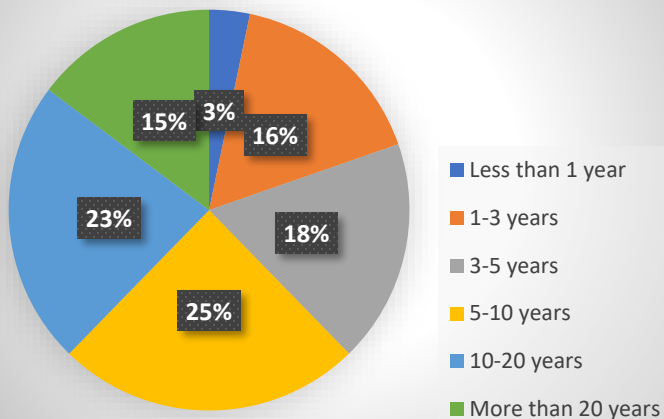
BMS (Band 5)



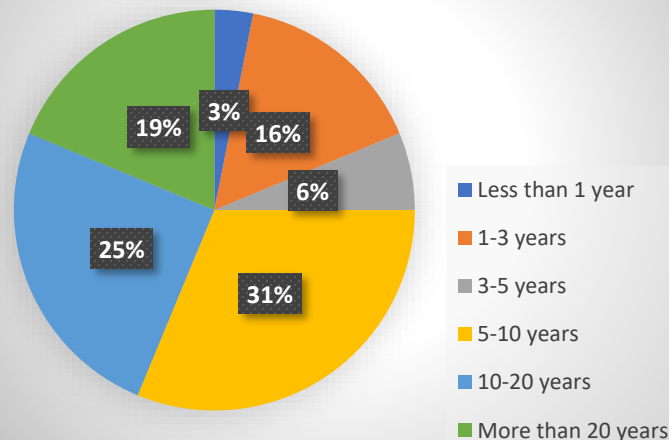
Summary

- Band 5 BMS's and LM had the highest percentage of staff being in the job role for less than 1 year (15% and 13%).
- AP, band 6 BMS and senior staff/lab managers have the majority of staff who have been in the role 10-20 years.
- Band 6 BMS, senior staff and lab managers have had staff in the role for more than 20 years.

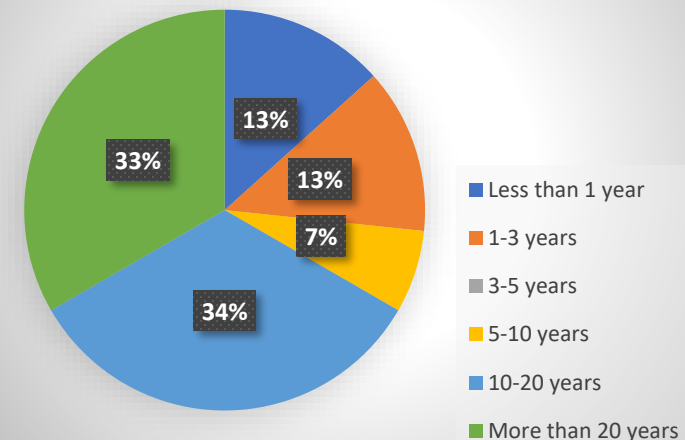
BMS (Band 6)



Senior BMS/Section Lead



Lab Manager





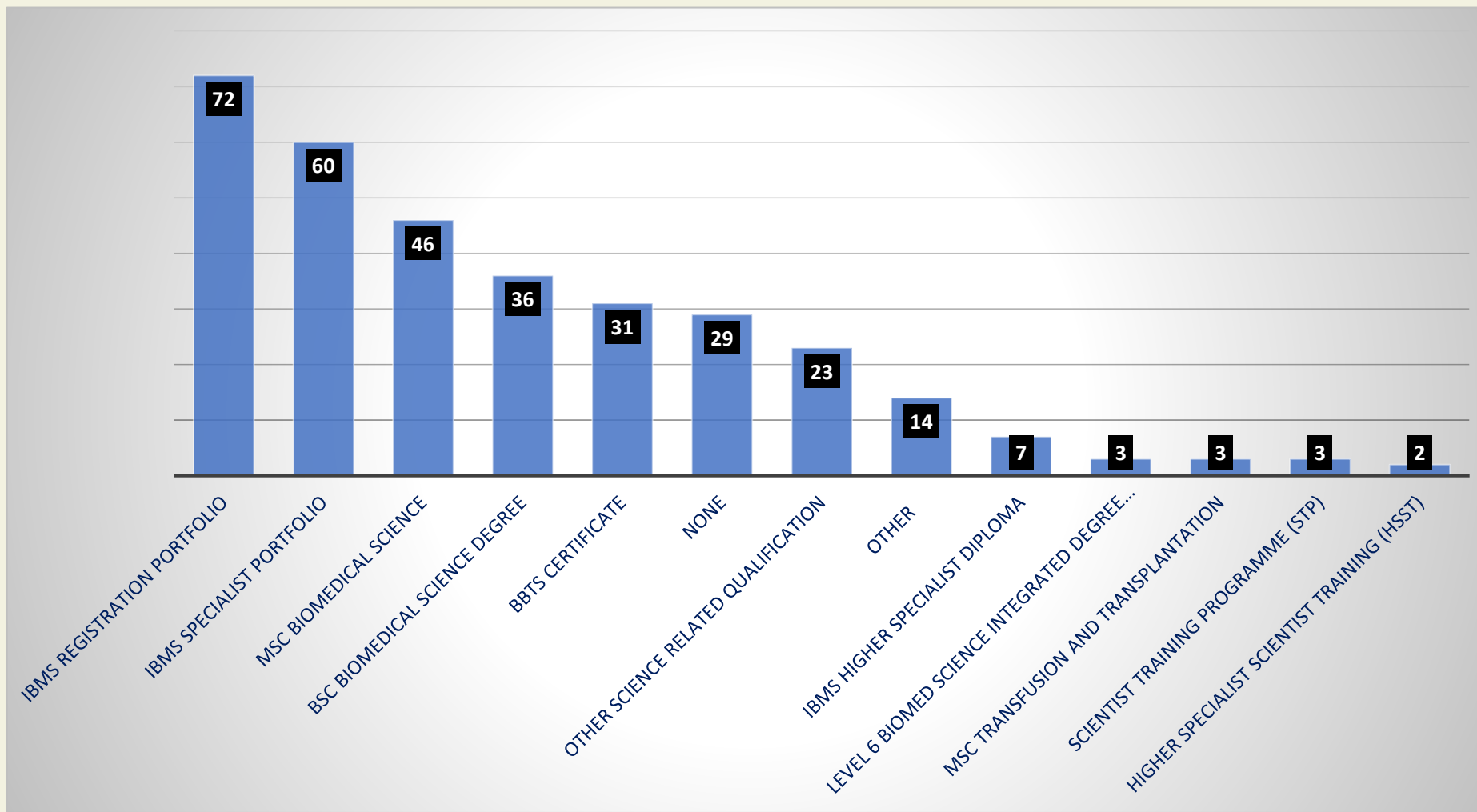
Q4. Have you completed or are currently working towards any of the following qualifications?



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Summary

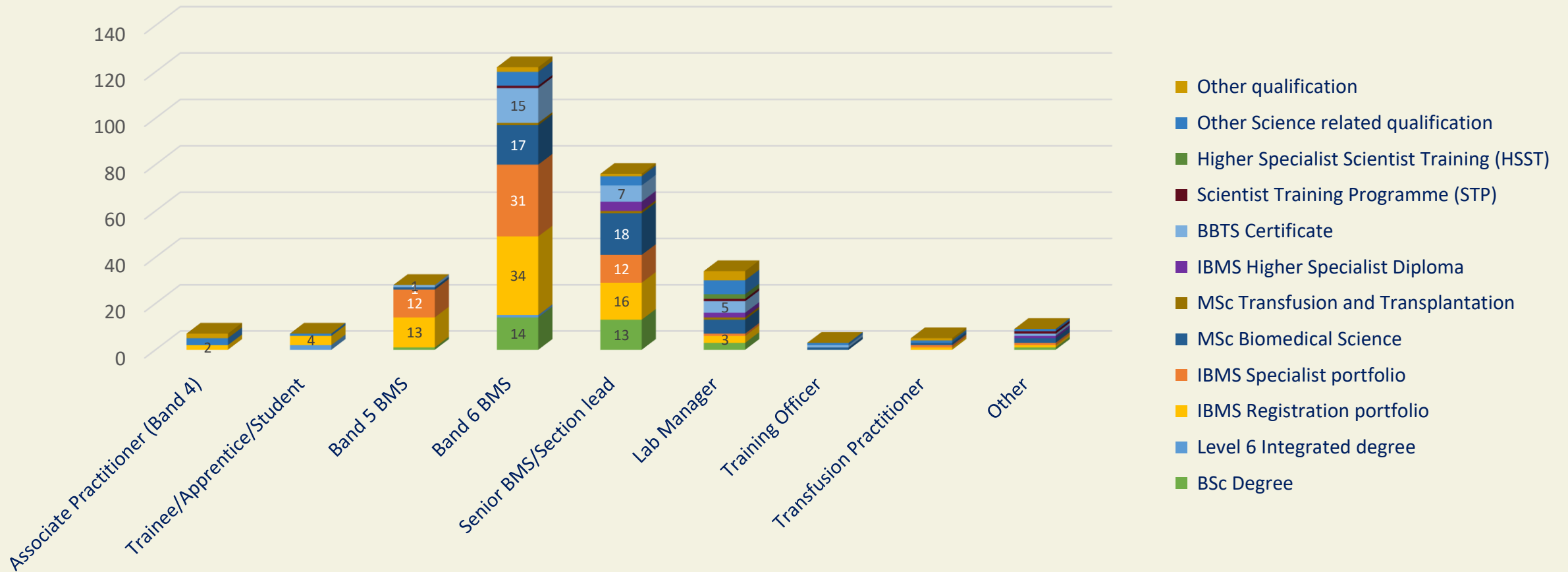
- A total of **329** qualifications had been completed or were 'working towards'.
- **40%** of respondents had completed the IBMS registration and IBMS specialist portfolios.
- 'Other' qualifications included Management /quality qualifications, MSc Biochemistry, IBMS Level II Cert of achievement, MSc Pathological Sciences.



19% had completed a post graduate qualification (MSc, HSD, STP, HSST)
 9% had completed the BBTS

Q4. Have you completed or are currently working towards any of the following qualifications?

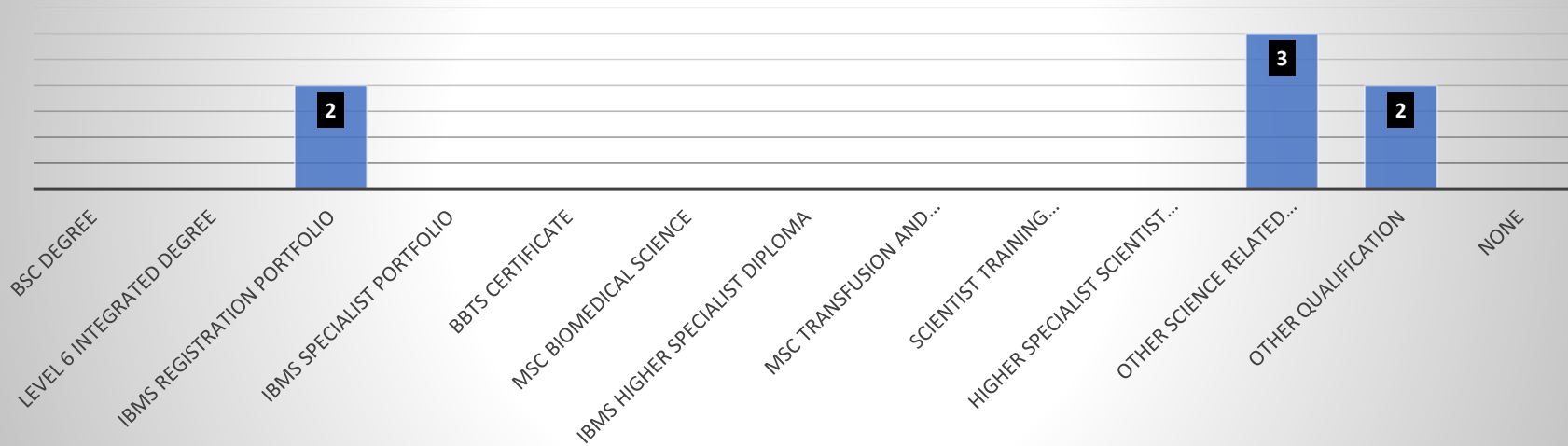
Total number of qualifications per job role



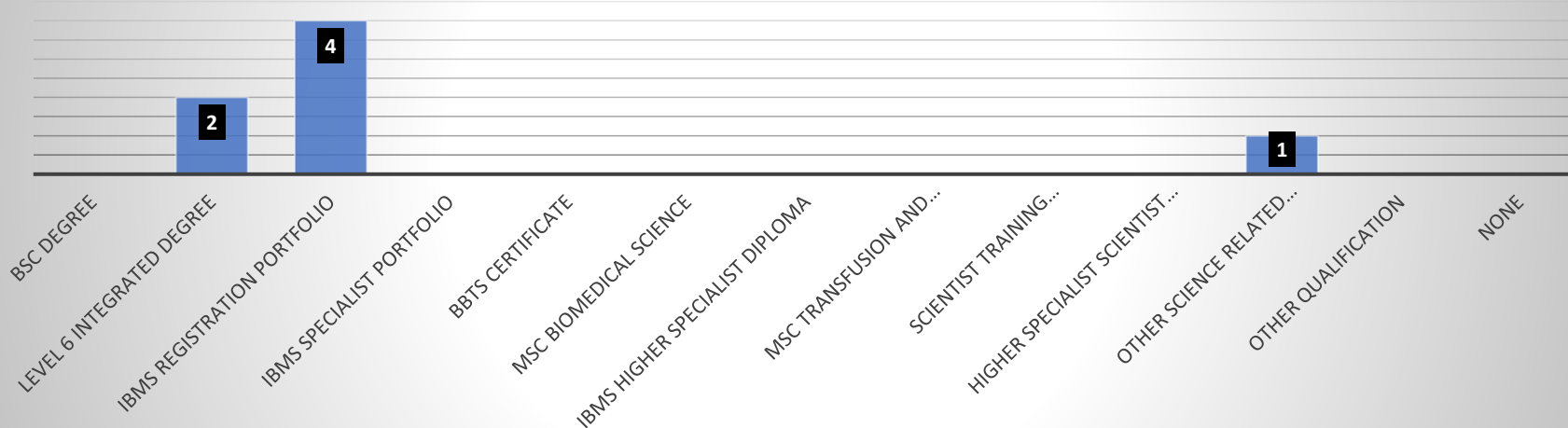
The majority of respondents had completed the IBMS registration and specialist portfolios, followed by MSc in Biomedical Science and BBTS Certificate.

Q4. Have you completed or are currently working towards any of the following qualifications? Grades of staff with qualifications.

Associate Practitioner (Band 4) - Qualifications



Trainee/Apprentice/Student - Qualifications



Summary

- 6/11 (55%) staff working in 'unqualified' roles (Band 4, trainees, students and apprentices) had obtained their IBMS registration portfolio.
- Indicates staff are awaiting/working towards Band 5 roles.

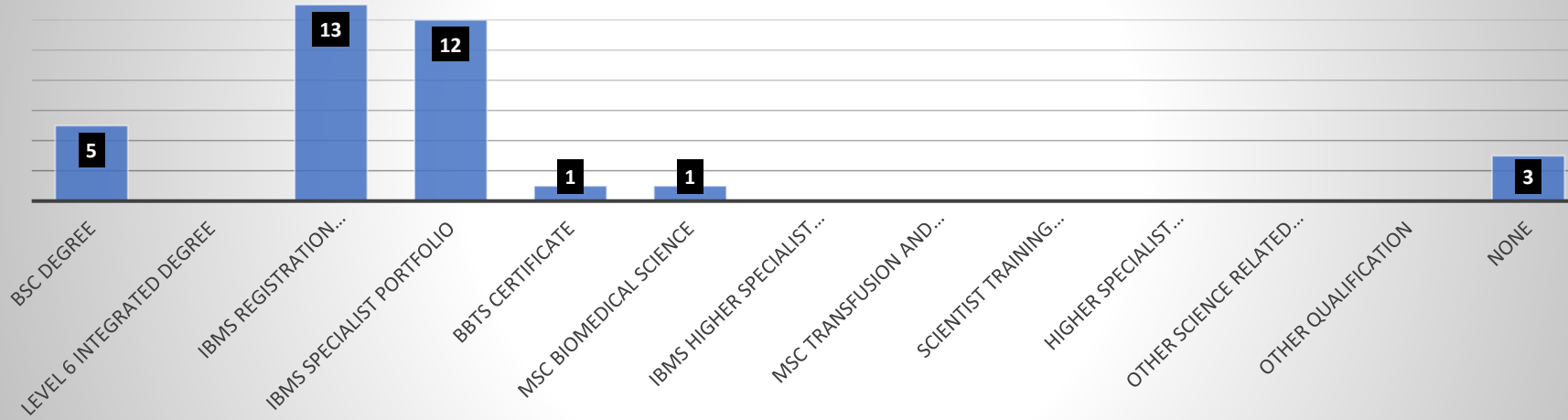


Q4. Have you completed or are currently working towards any of the following qualifications? Grades of staff with qualifications.

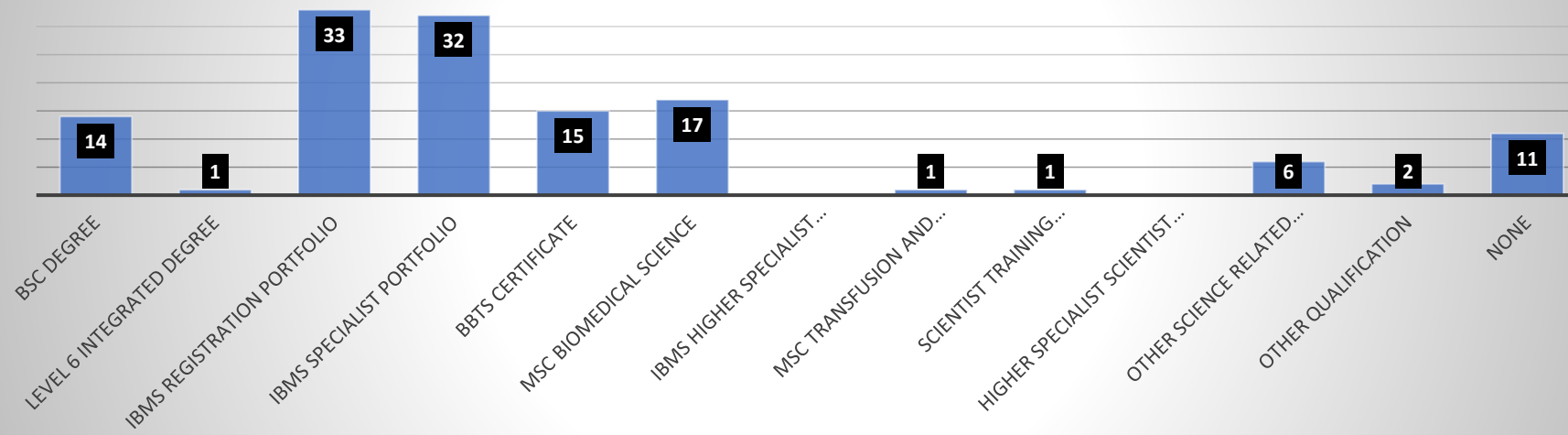


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Band 5 BMS - Qualifications



Band 6 BMS - Qualifications



Summary

Band 5

- 13/20 (65%) Band 5 staff had their IBMS registration portfolio.
- 12/20 (60%) Band 5 staff had obtained their specialist portfolio (eligible for Band 6 role).
- 2/20 (10%) had a post graduate qualification.

Band 6

- 11/61 (18%) answered 'none'.
- 32/61 (52%) had completed the specialist portfolio (indicating progression from 5 to 6).
- 15/61 (25%) had completed the BBTS certificate.
- 19/61 (31%) had completed a post graduate qualification.



Q4. Have you completed or are currently working towards any of the following qualifications? Grades of staff with qualifications.



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Summary

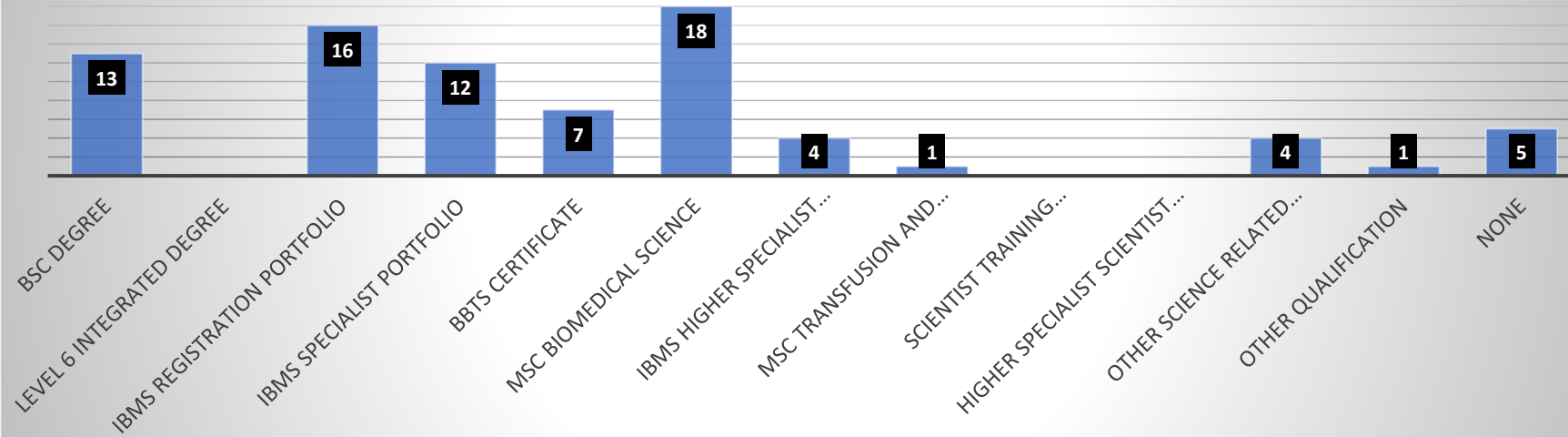
Senior/section lead

- 16/32 (50%) and 12/32 (38%) section leads had completed both IBMS portfolios indicating career progression.
- 23/32 (72%) had a post graduate qualification.
- 7/32 (22%) had completed the BBTS certificate.
- 5/32 (16%) selected 'none'.

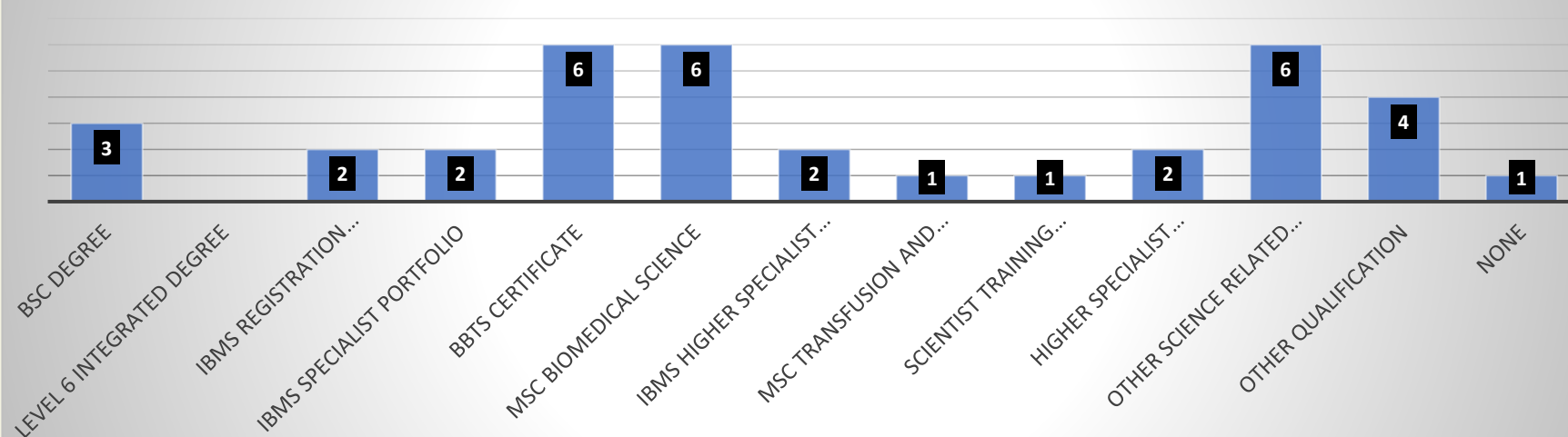
Lab Manager

- 6/15 (40%) had completed the BBTS certificate.
- 12/15 (80%) had completed a post graduate transfusion qualification.
- Other qualifications included leadership and management or other science related degrees.

Senior BMS/Section Lead - Qualifications

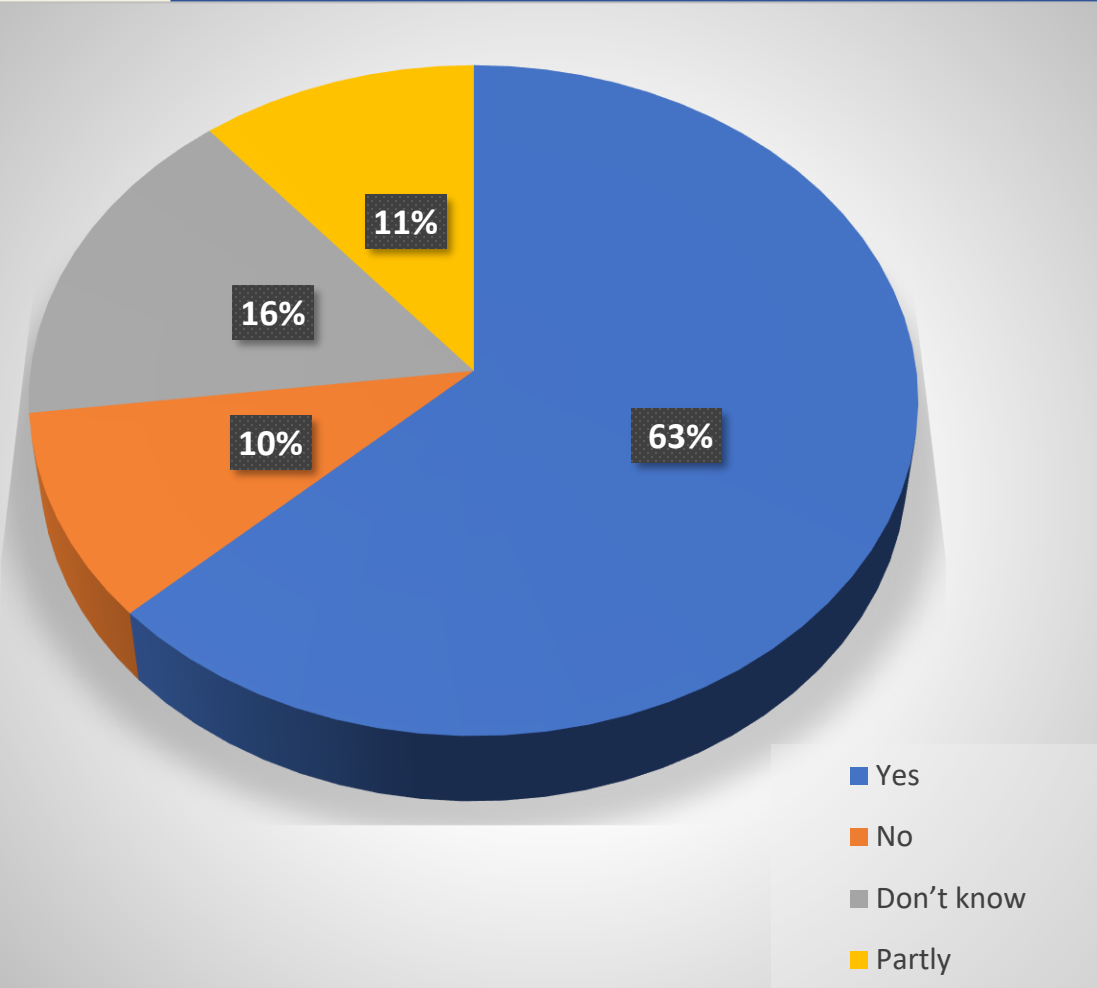


BT Lab Manager - Qualifications

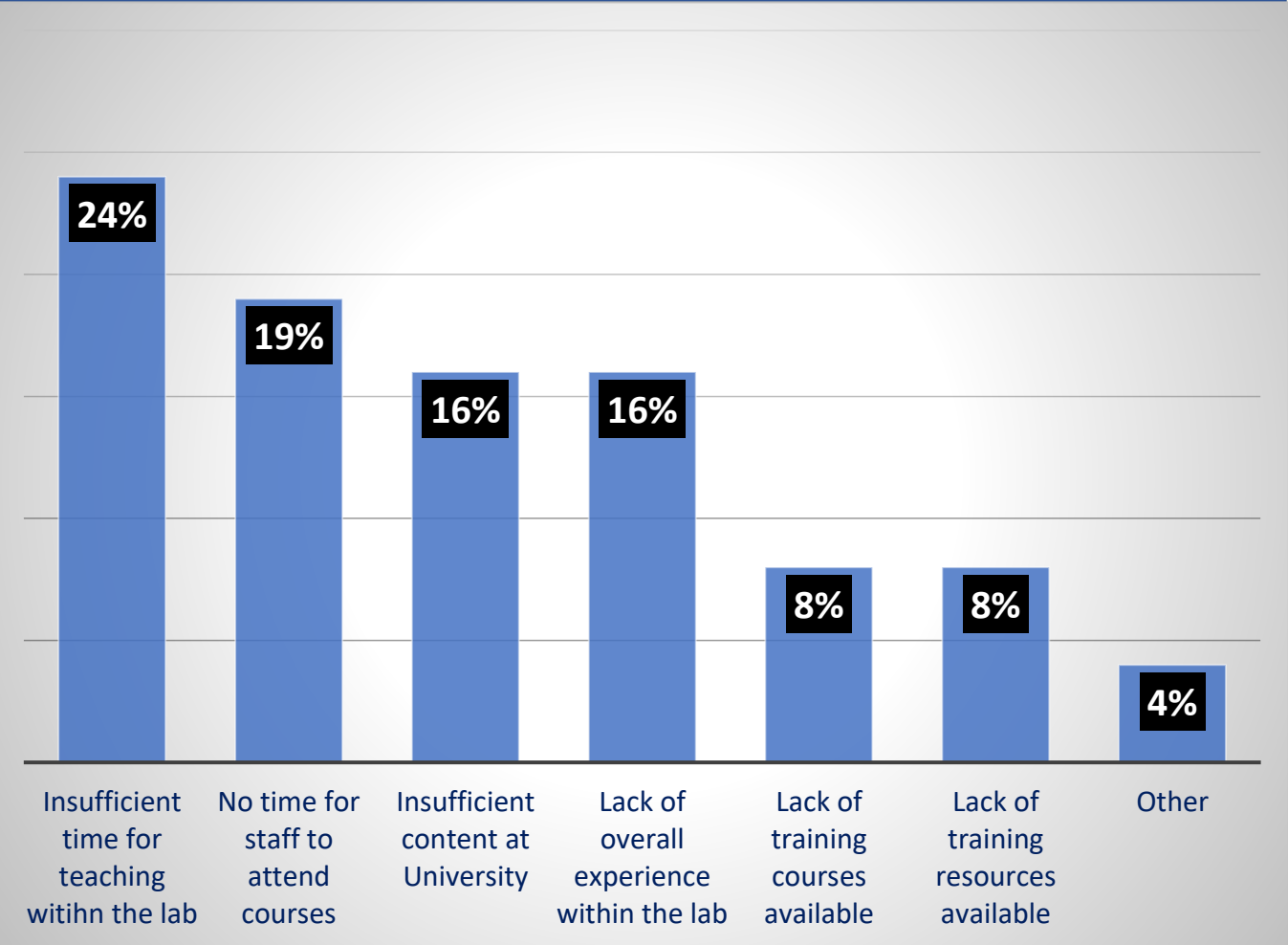




Q5. Do you feel that there are Transfusion knowledge gaps within your department?

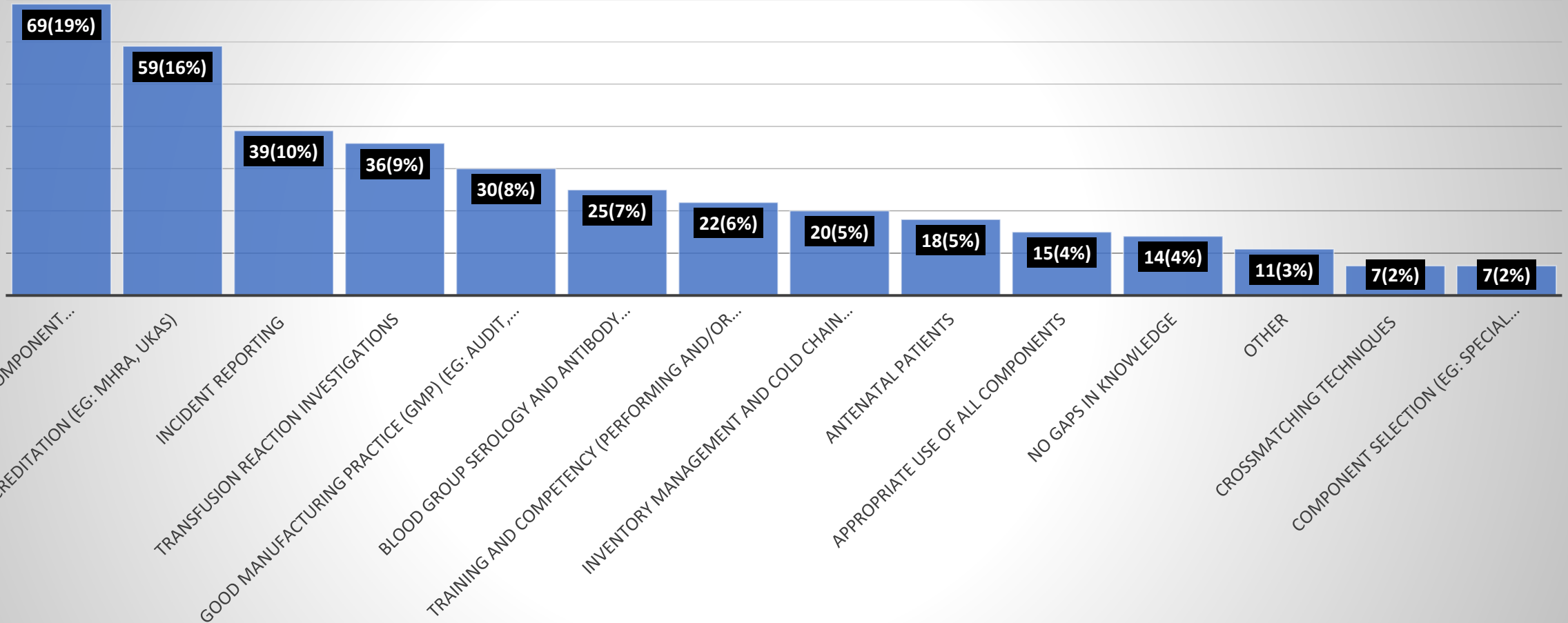


Q6. In your opinion, what do you think contributes to Transfusion knowledge gaps? (select all that apply)



63% of staff felt there were knowledge gaps within their department. 24% was attributed to insufficient time for teaching, 19% from a lack of time to attend courses, 16% due to insufficient transfusion content at university and 16% as a lack of overall experience within the laboratory.

Q7. What are your knowledge gaps? (select all that apply)

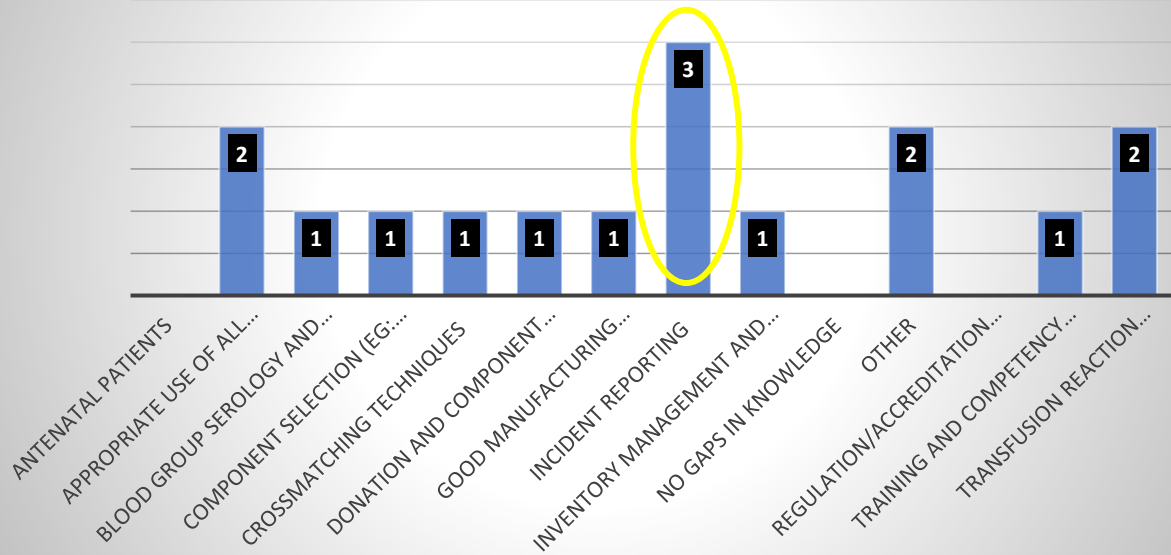


Top 5 topics for knowledge gaps

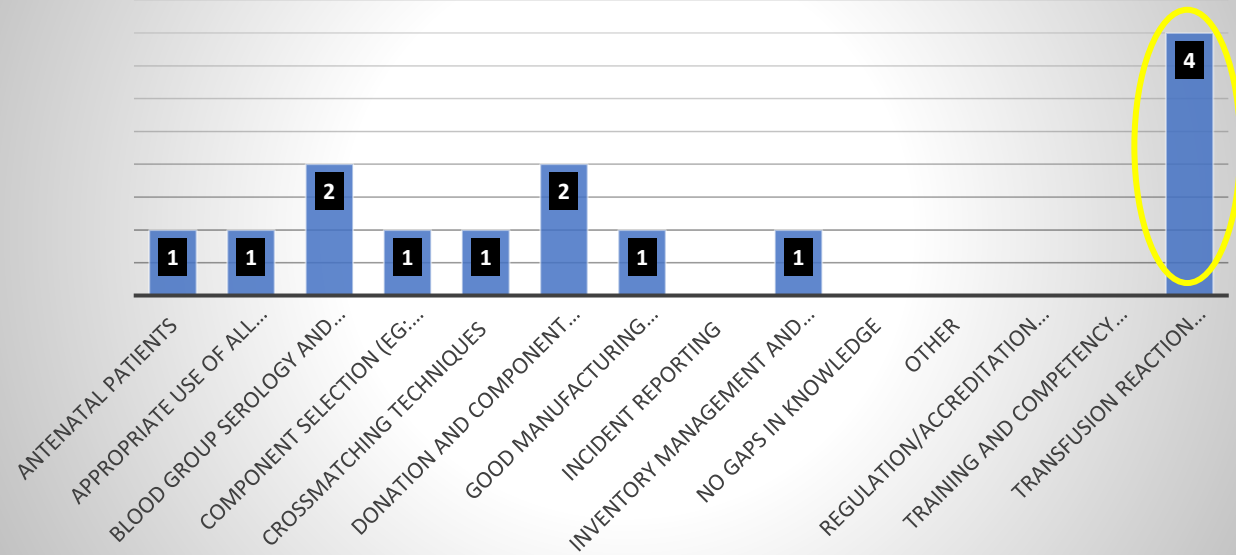
19% - donation and component preparation
 16% - Regulation and accreditation
 10% - Incident reporting
 9% - Transfusion reaction investigations
 8% - Good Manufacturing Practice (validation, audit etc)



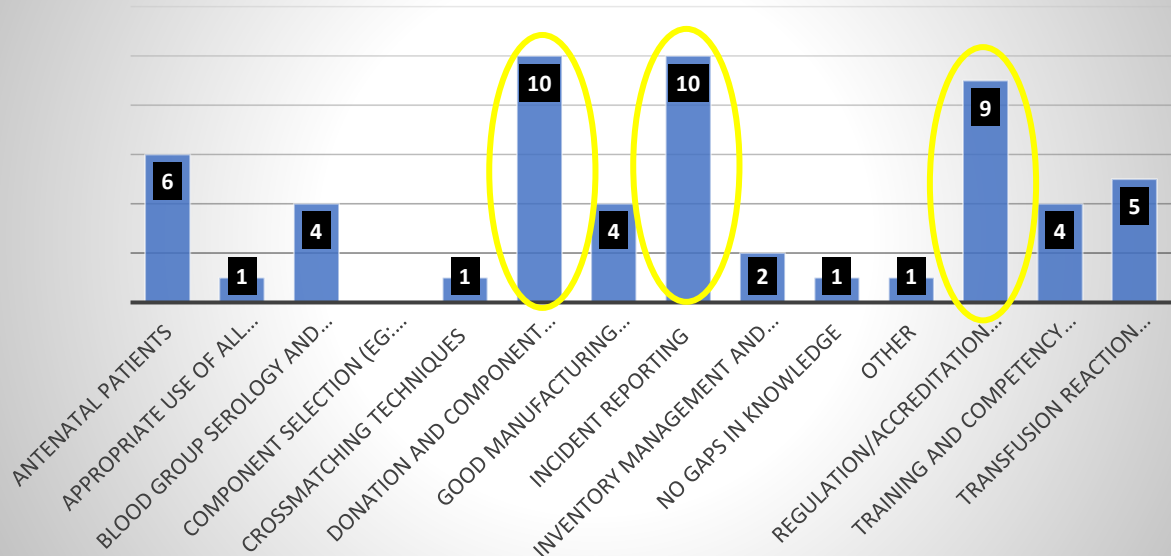
Knowledge gaps Associate Practitioner



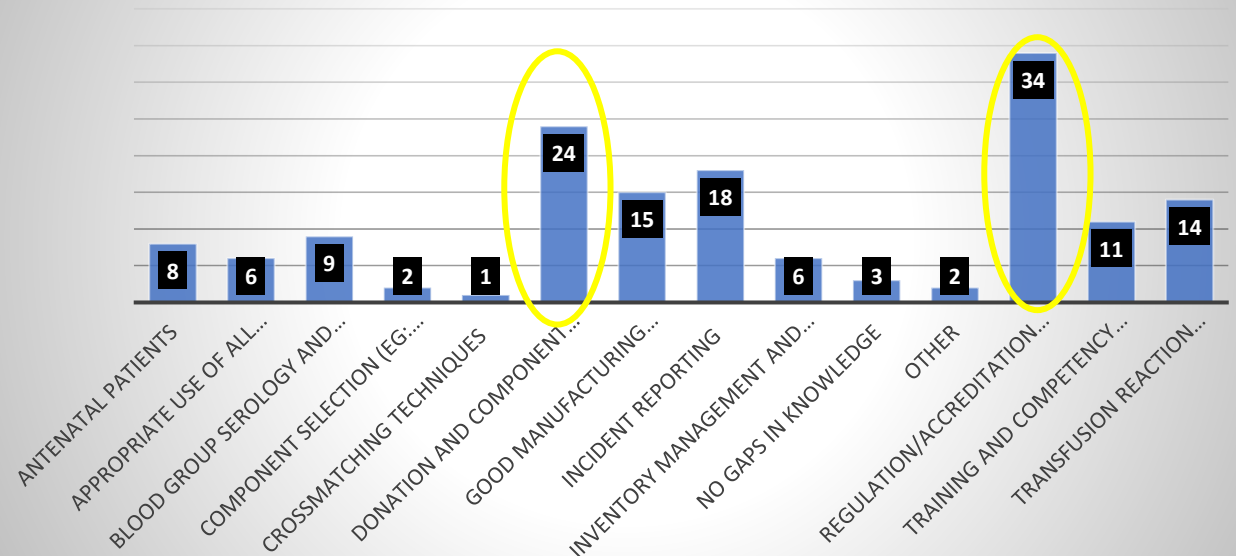
Knowledge gaps Trainee/Student



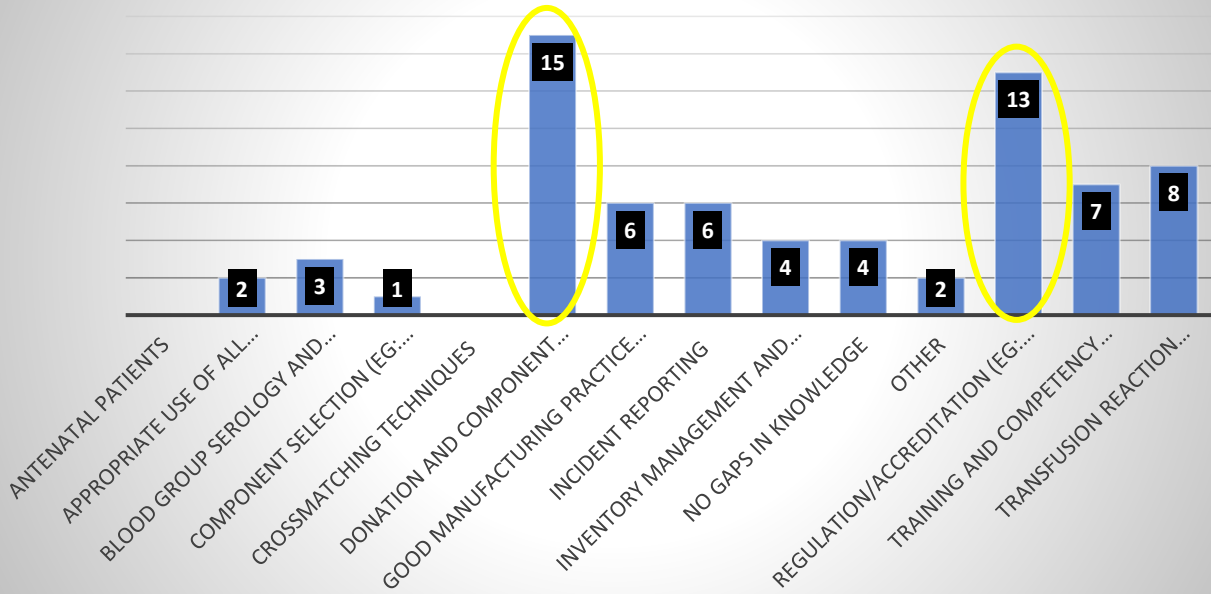
Knowledge gaps Band 5 BMS



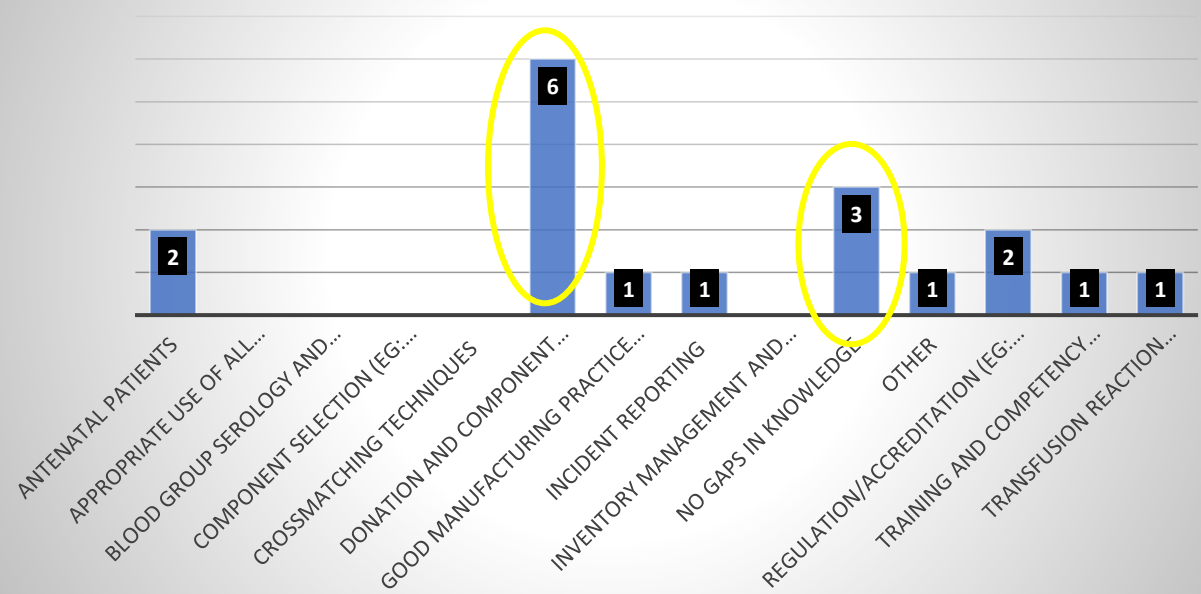
Knowledge gaps Band 6 BMS



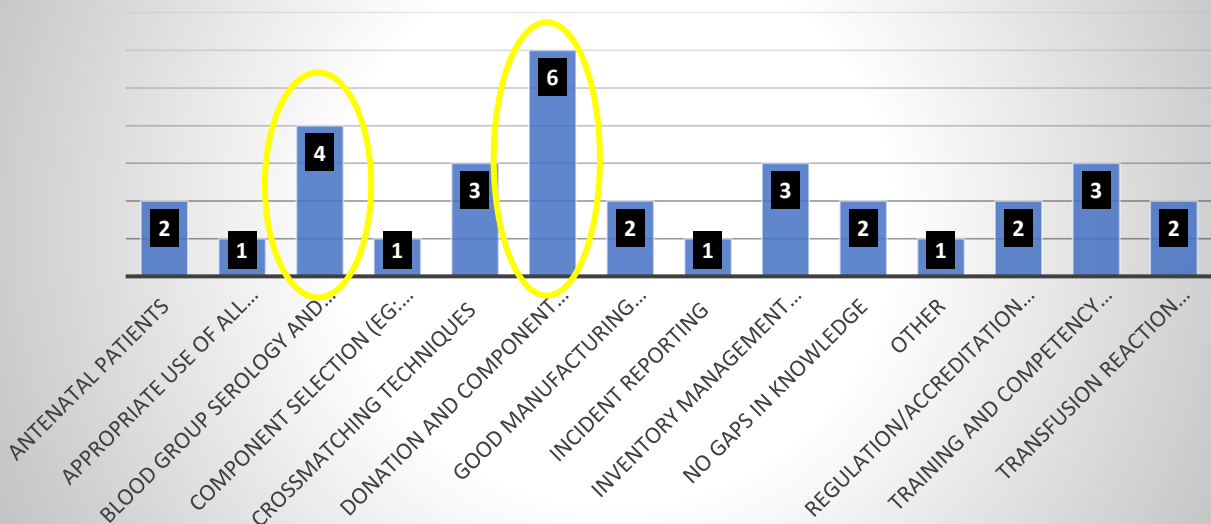
Knowledge gaps Senior BMS/Section lead



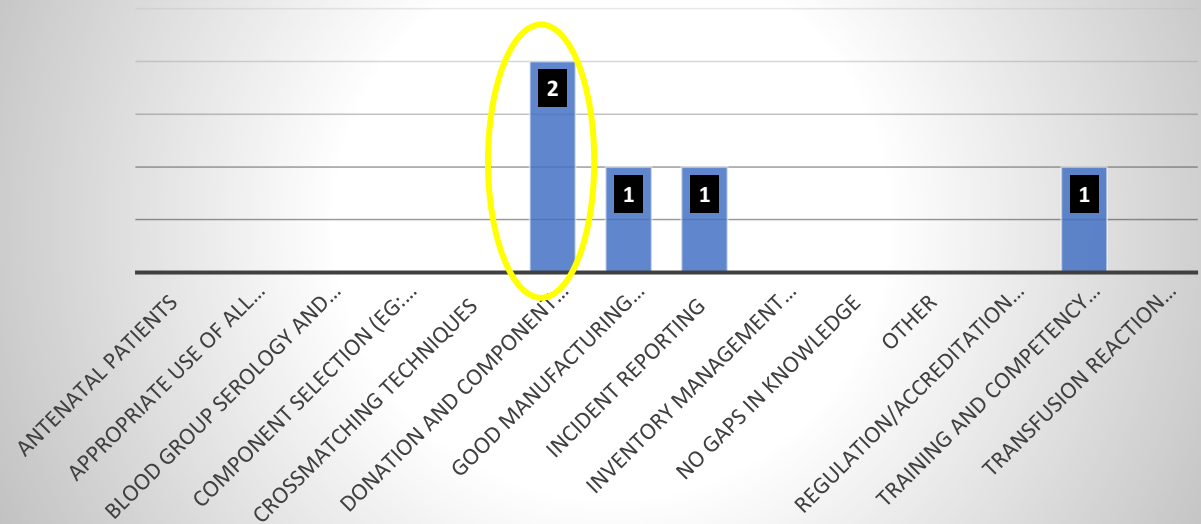
Knowledge gaps Laboratory Manager



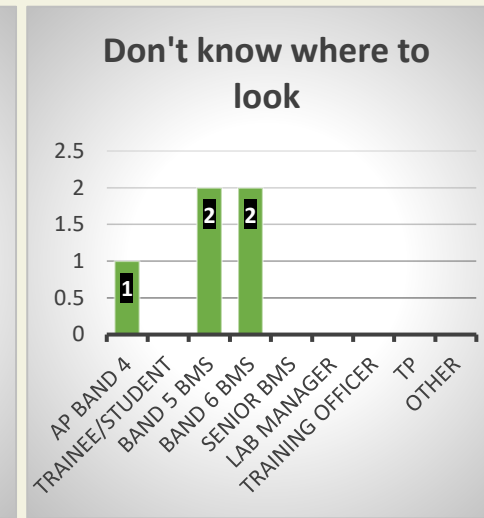
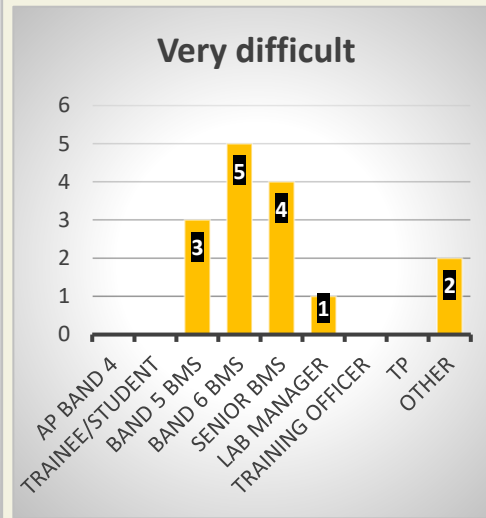
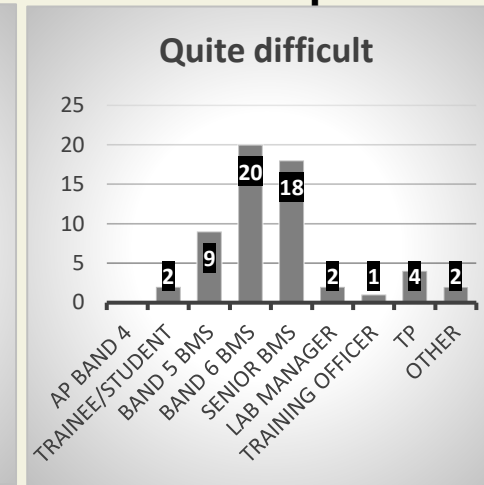
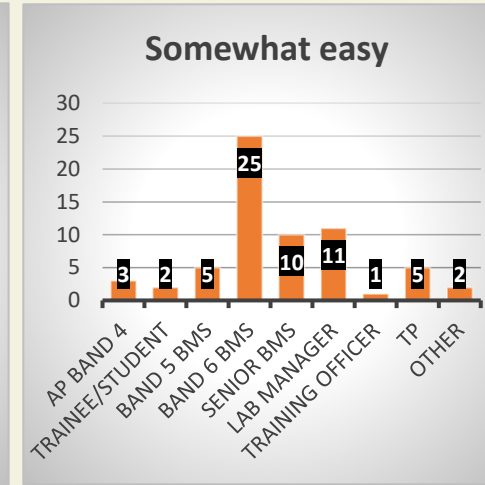
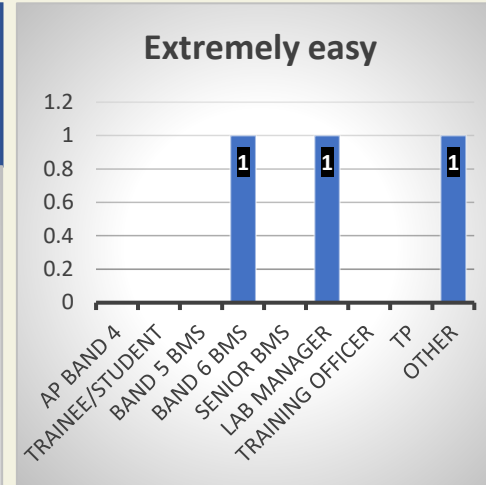
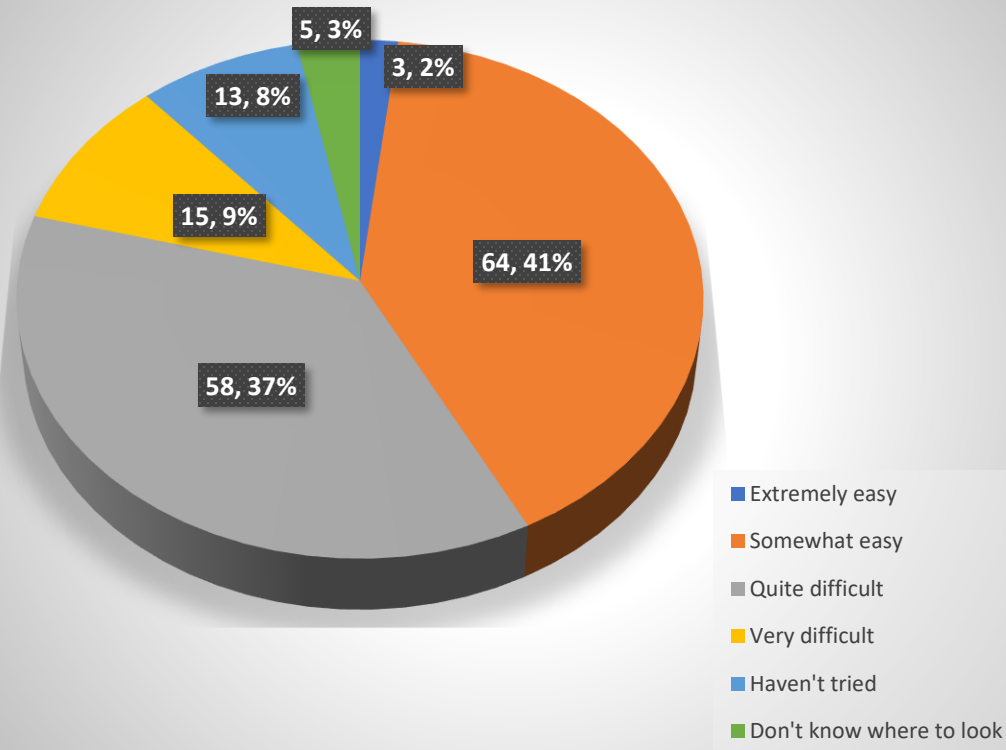
Knowledge gaps Transfusion Practitioner



Knowledge gaps Training Officer

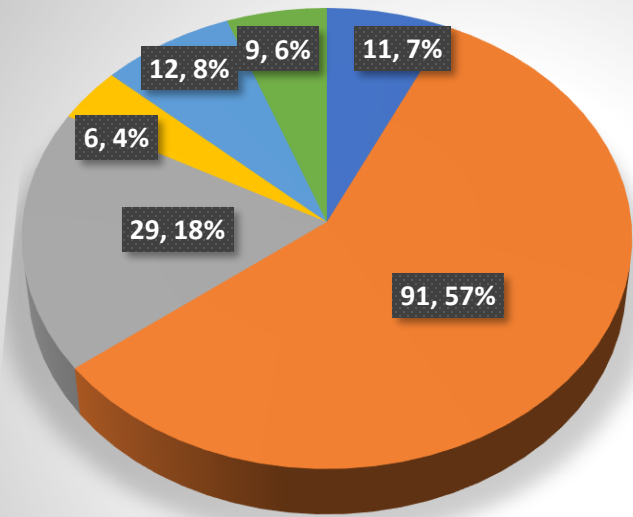


Q8. How easy is it to access/attend Transfusion training eg: courses, events, webinars etc?

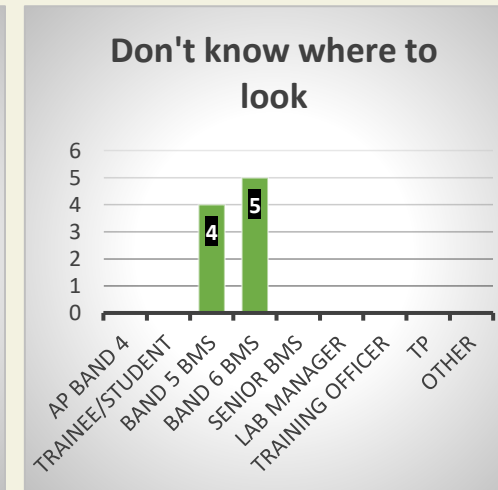
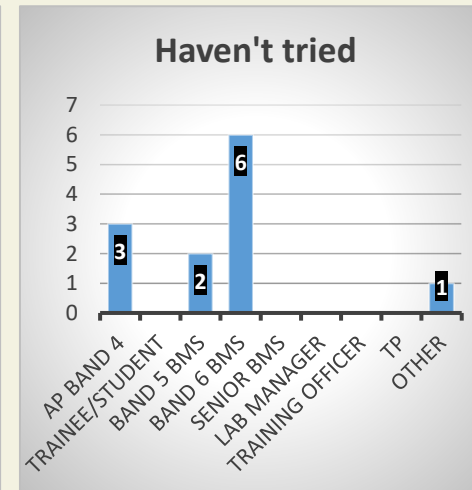
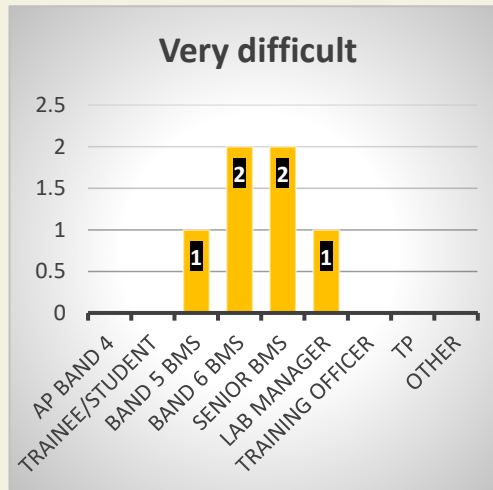
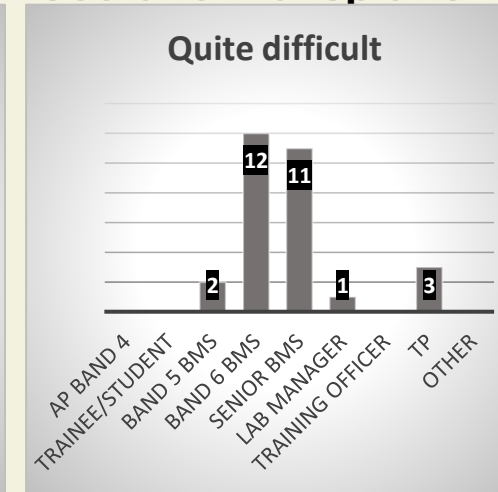
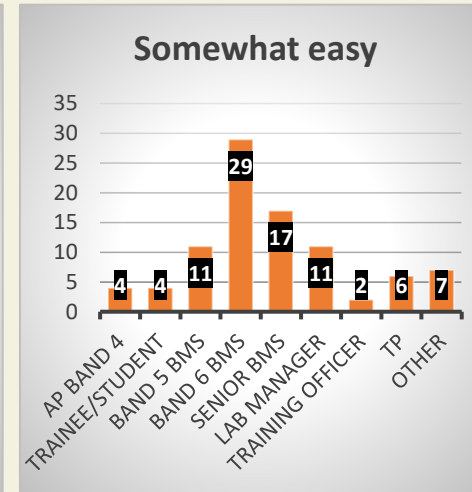
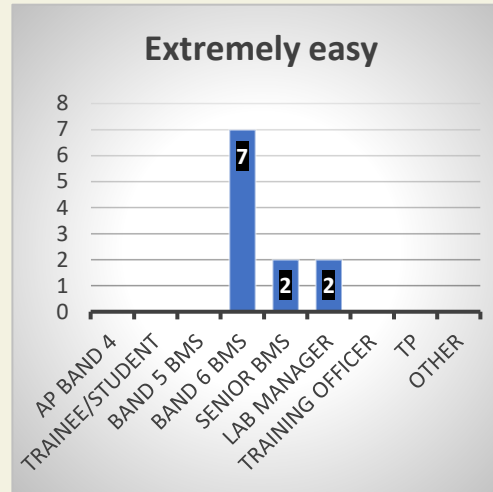


41% of staff found accessing training somewhat easy and 37% quite difficult – almost an even split, possibly represented by BMS Band 6 staff (25 and 20) as they were largest group. Only 9% found it very difficult to access. 8% haven't tried and 3% didn't know where to look.

Q9. How easy is it to access Transfusion education resources eg: journals, online resources, information leaflets etc?



- Extremely easy
- Somewhat easy
- Quite difficult
- Very difficult
- Haven't tried
- Don't know where to look



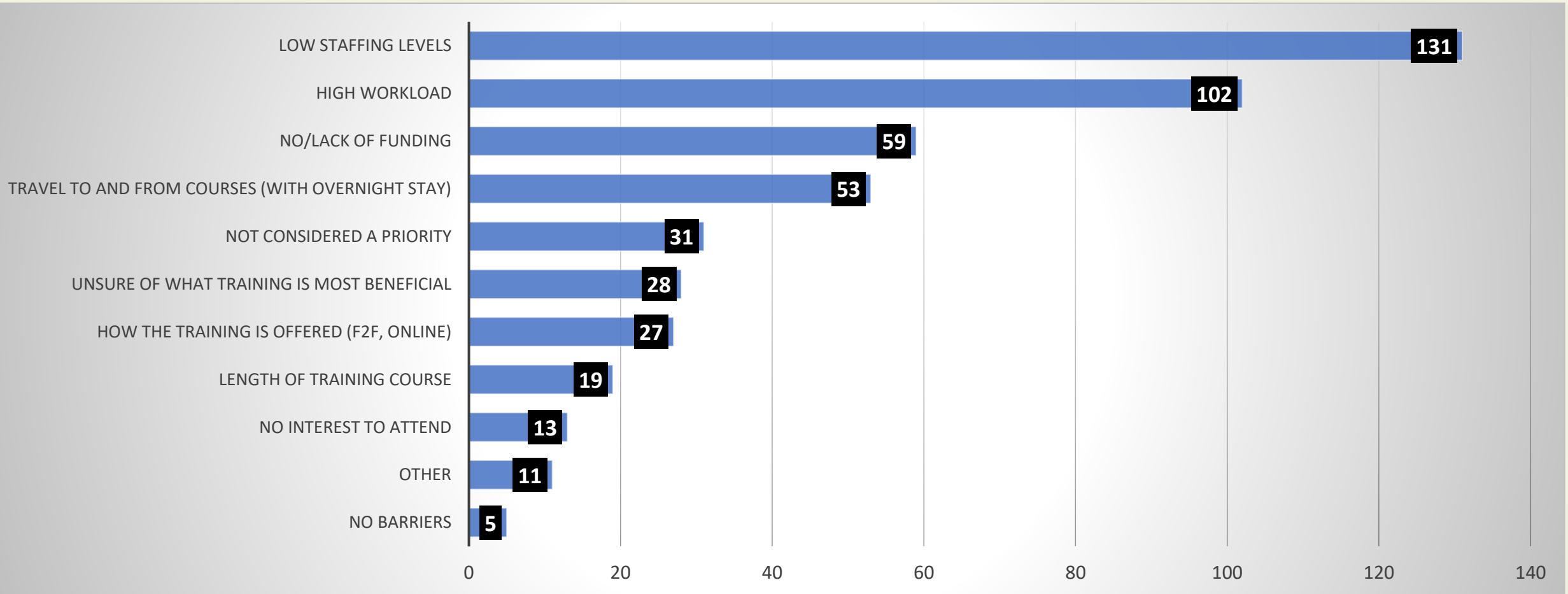
Majority of Band 6 staff represented in the survey. **57%** of staff found accessing education resources as somewhat easy. **18%** found it quite difficult. A total of **14%** haven't tried or didn't know where to look and **7%** found it extremely easy, this was seen in Band 6 and senior staff.



Q10. What barriers (if any) are there that prevent you or your colleagues attending training courses?



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Barriers are due to capacity issues and the availability to send or free up staff, this correlates with high workload. Funding is also a barrier: for courses, travel and overnight stay. 'Other' included: no official training for some topics (eg: RCA's for SHOT), difficulty obtaining transfusion funding for NHSBT courses against other disciplines. Mobility issues for travelling and online learning for long periods of time.



Q11. For your department, what area do you think training should focus on to most **positively impact patient safety**? Please rank from 1 to 5, with 1 being the most impact.

Rank	Area of focus	Percentage agreed to placement
1st	Transfusion scientific knowledge	66%
2nd	Indications/Appropriateness of request	35%
3rd	Blood stock management/component selection	40%
4th	Quality management	53%
5th	Regulation and accreditation	58%

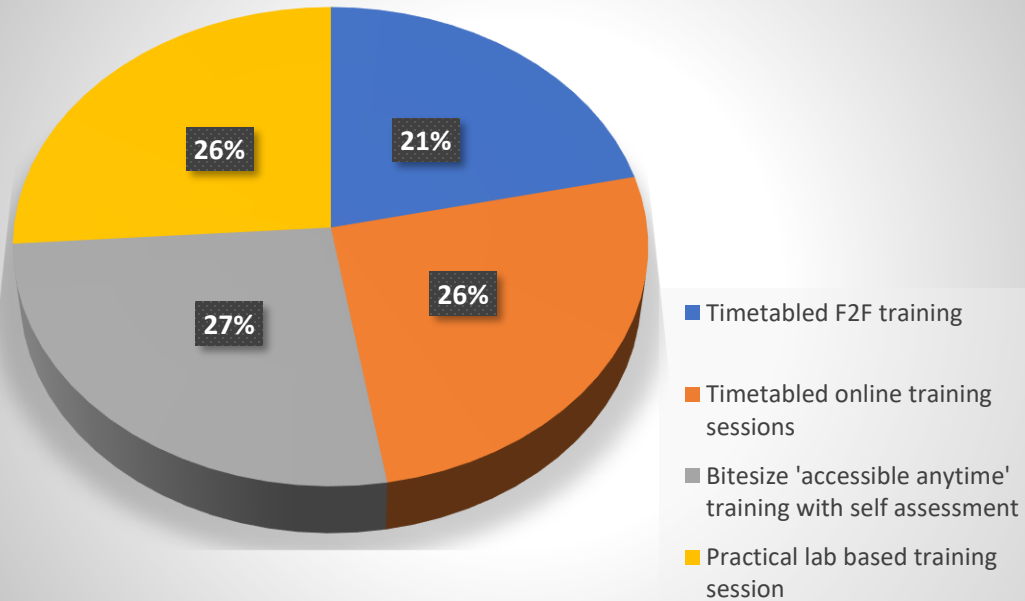
Q12. For your department, what area do you think training should focus on to **most impact staff competence to practice**? Please rank from 1 to 5, with 1 being the most impact.

Rank	Area of focus	Percentage agreed to placement
1st	Transfusion scientific knowledge	82%
2nd	Indications/Appropriateness of request	44%
3rd	Blood stock management/component selection	47%
4th	Quality management	58%
5th	Regulation and accreditation	65%

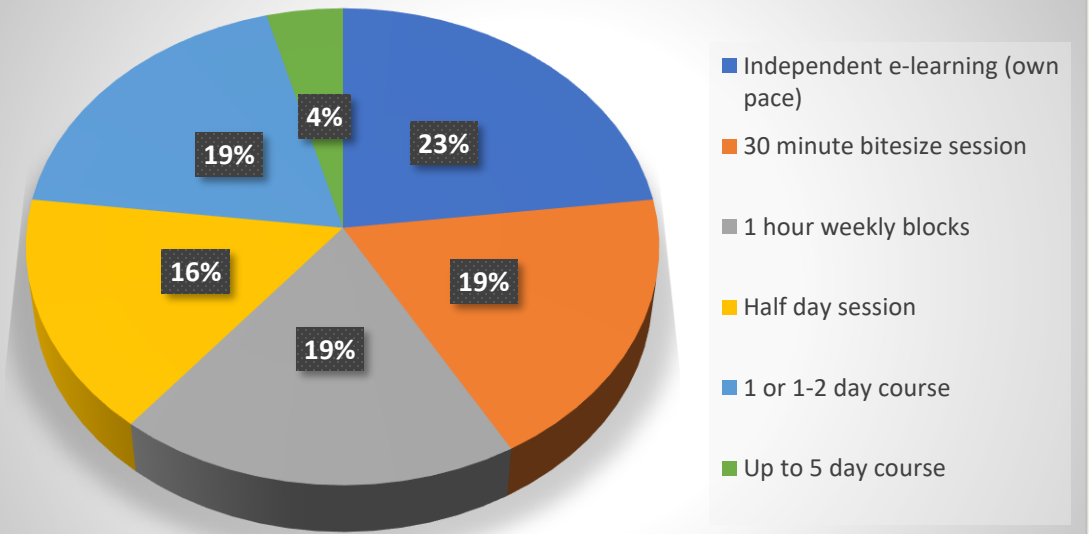


Areas ranked the same for both questions. Transfusion scientific knowledge ranking highest and **regulation lowest**, is this due to lack of knowledge around quality and regulation?

Q13. How would you prefer to access training?



Q14. What length of training would you prefer to be available?



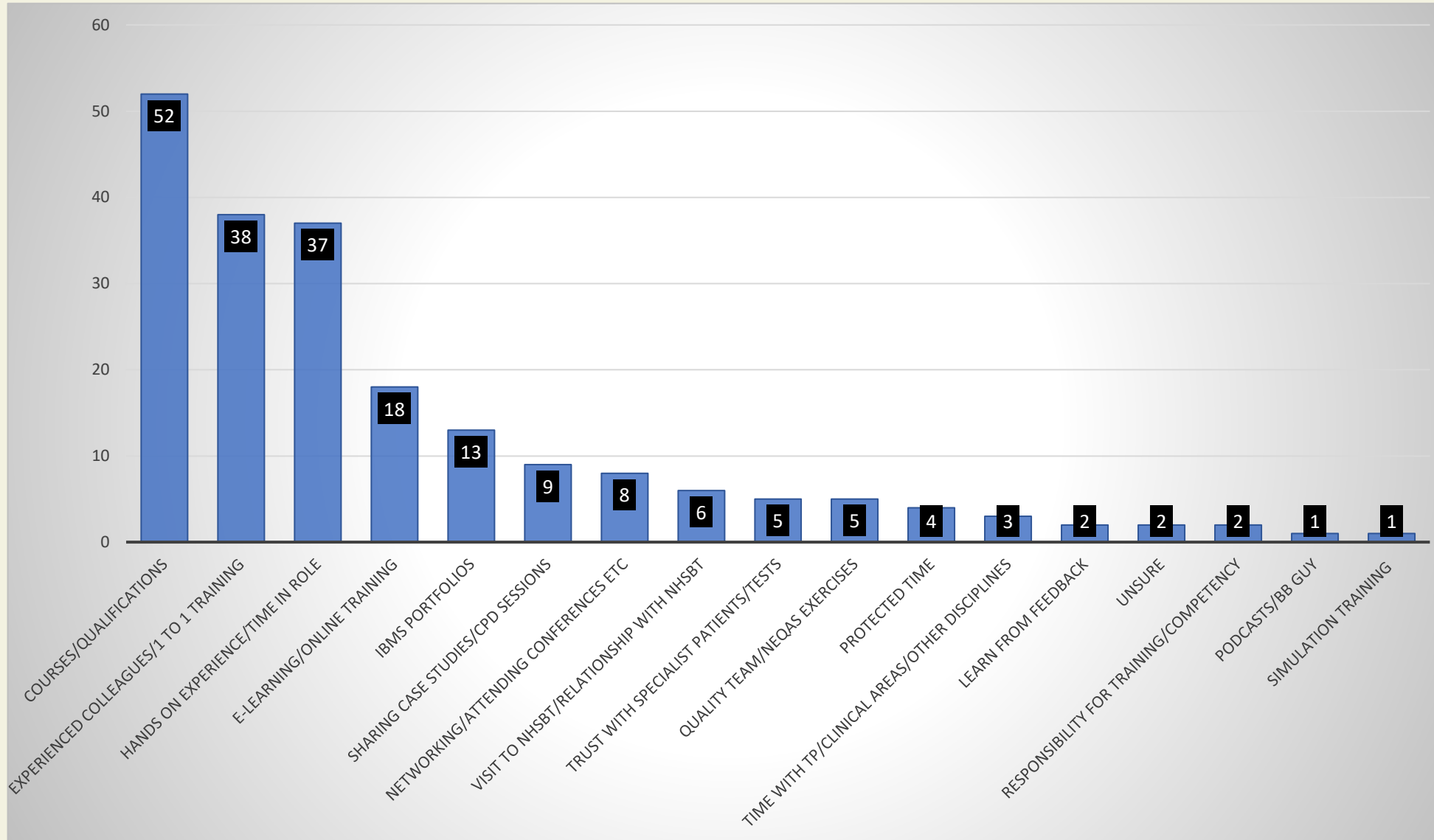
Preferable access to training was quite evenly split between the 4 options. Preferred length of training was independent e-learning (23%) followed closely by 30 minute bitesize, 1-2-day course and 1-hour blocks. The least preferable was the 'up to 5-day course.'



Q15. What has been most useful to you for your personal Transfusion development? (Open question)



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Summary

- 206 responses
- Majority (25%) said that **courses and qualifications** have been useful
- 18% have benefitted from 1 to 1 training or good mentorship
- 17% have benefitted from time and experience
- E-learning and the convenience of online education has been useful to 9%



Q15. What has been most useful to you for your personal Transfusion development? – Interesting comments



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Taking on a **hybrid role** as transfusion practitioner alongside BMS has aided in clinical knowledge and more quality aspects of my roles such as incident investigation.

I did not get this opportunity whilst solely working in the lab.

Excellent training from my senior, support from my chief to attend the **NHSBT training courses (tour of facilities, basic course and specialist course)** were all very useful and I highly recommend to all colleagues training in transfusion)

The **old NBS book by Phil Learoyd** was a godsend years ago when I was training. Not sure if anyone uses that now or not.

I have an Australian bachelor from RMIT Uni where there was a lot of transfusion covered, this helped set me up with a very good understanding of the basics. All CPD has built on from these basics. Staff from British unis do not have these basics to build on. **The IBMS needs to be pushing for transfusion in Uni, what is the point of accreditation?**

Completing my **specialist portfolio** and also attending the **STSP course**. Also, **good relationship with NHSBT Newcastle so have been for a visit** and feel comfortable discussing cases with them when I'm unsure.

The **PITS course provided by NHSBT was really useful** when I first started as a BMS and I am due to go on the **specialist course** next year. Since then, I have found I have developed a lot more from when I started working on the **out of hours rota** due to having to cover the lab myself and deal with any issues that may arise.

Access to training that I can do without having to travel or be away from home and is inexpensive or free

Completion of the BBTS certificate NHSBT practical courses Podcasts i.e., blooducation, blood bank guy

Attendance at conferences/meetings e.g. UKNEQAS/BBTS meeting. **Regular NHSBT education sessions** e.g. **BMSSEDG group** NHSBT Introduction to **Transfusion 5-day course** early on in training Ability to **visit RCI Newcastle** for 2 days of training Working in Trusts that provide extended testing to improve practical knowledge **Textbooks available on site**

From my experience there are significantly more resources and courses available for Transfusion than for Haematology & Coagulation. I believe the biggest issue is uptake and the way to tackle that barrier to learning is to **provide shorter length training, or training that is independent and can be accessible at your own pace.**



Q16. Please feel free to provide any further comments, thank you



Blood and Transplant

Any **external training sessions would be gratefully received** by the lab. Guidance on competency and re competency in the time restricted lab would also be beneficial.

Whilst it is important for lab staff to be trained there are numerous options available for them (if they have time). Clinically there are relatively few, although it is improving. **Transfusion Education is seen as relatively low priority unless you are specialising in transfusion.**

TPs need to be line managed and supported by NHSBT same as Wales and Scotland. Banding, training, competencies are so inconsistent. Within the lab environment it is all about the BMSs

More webinars on complicated cases, elutions, quantitations, different types of transfusion reaction, FMH

NHSBT courses I have attended/ sent staff on are very good - would utilise more if they were available

Being able to **preview what the workbooks look like for PITS course** etc so we can gauge which staff would benefit most

Videos or access anytime training would be fantastic

We could use some more **grouping discrepancies with a self-assessment perhaps? Who needs special requirements and why with self-assessment**

It can be difficult for people with mobility problems to either sit for long periods of time or travel long distances so **online learning and in smaller portions can be more helpful**

One dedicated website for all transfusion resource education/ links would be helpful

New staff come into the department have almost no transfusion knowledge. We are using a combination of face to face and e-learning packages to teach the basics.

Very very poor knowledge/experience from universities. Trainees directly out of Uni have no knowledge of transfusion and it's like training someone from the very beginning

It's difficult to relieve staff for online webinars and sometimes they are watching them while at work. It could be a distraction, a **separate NHSBT webpage with previous recorded online webinars would be useful**

There is **no time for lab staff to attend short training courses due to being consistently understaffed.** Lack of knowledge and training discourages staff to progress and be the best they can in their role.



Staffing

- Low staff levels was a frequent comment.
- No protected time for training.
- Senior staff remain on shifts/covering bench work therefore less time to provide training.
- Senior staff don't value training was a comment.
- Experienced staff would like to remain up to date, have refreshers, training given to new and inexperienced staff.

Knowledge

- 63% of staff felt there were knowledge gaps within their department.
- Reasons: insufficient time for teaching, to attend courses, insufficient transfusion content at university and lack of overall experience within the laboratory.
- Almost all job titles had component/donation and quality aspect in knowledge gaps however TP gap in serology.
- 'No gaps in knowledge' was seen more in higher bands.

Qualifications

- 16% of senior staff (senior BMS + Lab Manager) selected 'none' for qualifications gained.
- 72% of Senior BMS staff hold a post graduate qualification.
- 80% of Lab Managers hold a post graduate qualification.
- 66% Lab managers held a different science related qualification/'other' qualification.

Experience

- 13% Lab managers have been in the job for less than 1 year – 67% for more than 10 years.
- 31% bands 6 with a post grad qualification.
- Majority (25%) said that **courses and qualifications** have been useful in their training.
- 'Transfusion scientific knowledge' was rated highest for training that would most positively impact patient safety and competence to practice.



Staffing

- Provide **bitesize webinars** accessible anytime
- **Online courses** seemed favourable as most staff could access resources than attend courses
- Requirement for **independent training** due to low staffing levels, shift commitments
- Access to **flexible training at any time** with no travel seems to be the most preferred route for training

Knowledge

- Signpost training for top 5 topics: donation and component use, regulation, transfusion reactions, incident reporting, GMP. (e-learning for health, SHOT)
- Transfusion Practitioner gaps serology knowledge – (T24 project)
- Poor Trust access to journals – **promote new webpage**
- Phil Leoroyd book/textbooks available on site, are there any resources like it? – **promote new webpage**

Qualifications

- 25% said that **courses and qualifications** have been useful included PITS/STPS/BBTS
- NHSBT courses in high demand – **monitor with waiting list**
- Poor knowledge from Uni – Uni survey (**T24 project**)
- Promote Transfusion and Transplantation MSc to hospitals
- Promote courses/MSc at BTEDG
- RE to discuss availability/access to NHSBT Brightspace modules as an external teaching tool

Experience

- Visits to NHSBT were considered useful – discuss the possibility of a staff swap between hospital staff and RCI
- 6% (band 5 and 6) didn't know where to look for resources – **promote new webpage**
- Organise stakeholder meeting with **IBMS, SHOT, UKTLC, TLM group** to discuss findings and next step (knowledge gaps)