

Quality Monitoring of HCS training in Scotland

NES has maintained its commitment to delivering high-quality HCS training across Scotland through rigorous QA procedures.

This year, our QA processes have encompassed the following key components:

- + Monitoring trainee progress through the Turas Training Programme Management system (TPM)
- + Training centre recognition
- + Trainer recognition
- + Annual Review of Competency Progression (ARCP) requests
- + Training plan submissions
- + Exit surveys
- + Annual confidential trainee surveys
- + Annual confidential supervisor surveys

.....
We have overseen

the completion of
479 QA processes
across all specialisms.



.....
This comprehensive approach highlights our dedication to fostering excellence in training and development.

We appreciate the collaboration of various HCS specialties, whose contributions are vital to the success of our QA initiatives.

Training departments and supervisors consistently engage with NES to ensure both the fulfilment of QA requirements and the ongoing enhancement of training quality.





QA requests n=479

- Exit Survey (80) 17%
- ARCP (185) 38%
- Training Plans (214) 45%

Figure 8: Number of QA requests

We are pleased to report several key achievements and areas for improvement based on this year's QA processes:

- + Strong QA engagement**
Our engagement with various HCS specialisms demonstrates our commitment to maintaining high training standards
- + High retention rates**
A notable retention rate of trainees within the NHS after programme completion indicates the success of our training initiatives
- + Identified challenges**
Issues such as procedural delays in the equivalence process, supervision quality, and workload management have been identified through feedback, which we are addressing to improve training experiences
- + Effective ARCP and training plan monitoring**
The transition to a continuous review model for ARCPs and training plans has proven beneficial, ensuring timely support and interventions for trainees.

To further refine our QA processes, we have partnered with external departments, including the Accreditation and Admissions department and the Operational Management team within the National School for Healthcare Science, and various directorates within NES.

This collaborative effort has been strengthened by the ongoing transformation process within NES, which has enabled enhanced dialogue and cooperation on QA standards and practices.

We are committed to maintaining the relevance and effectiveness of our QA procedures to ensure that our goal of delivering exceptional training across all HCS specialisms is achieved.

We welcome and encourage feedback and suggestions from stakeholders at any time, as these contributions are crucial to our continuous improvement efforts.

Monitoring trainee progress

The NES HCS team tracks the progress of HCS trainees throughout Scotland using the TPM system.

To assign an NTN to each trainee, we require the completion of an online form. This form gathers key information about the learner, their training programme, training location, and supervisor(s), enabling us to monitor training effectively and ensure the quality of the learning journey.

We are dedicated to ensuring high standards in HCS training for all trainees, whether or not they are directly funded by NES. Therefore, we request that all training centres complete the NTN request process for every trainee in their department.

We encourage the submission of this online form for anyone enrolled in a recognised HCS training programme in Scotland.

For more details, please refer to [NES HCS information site NTN information](https://www.nes.scot.nhs.uk/information/hcstraining.nhs.scot/quality-assurance/national-training-number-ntn) (hcstraining.nhs.scot/quality-assurance/national-training-number-ntn).

As of 31 March 2024, there were **239** trainees recorded in the TPM system. Trainees are involved in various training programmes, from academic courses to higher specialist equivalence training, across different Health Boards in Scotland. The following graphs illustrate the distribution of trainees among these programmes and Health Boards.



NTN holders by training category n=239

- Postgraduate Qualifications (10) 4%
- IBMS Trainee (12) 5%
- Clinical Science Higher Specialist (22) 9%
- STP (28) 12%
- Biomedical Science Postgraduate Degree (32) 13%
- HCS Practitioner Trainee (40) 17%
- Clinical Science STP Equivalence (95) 40%

Figure 9: NTN holders by training category

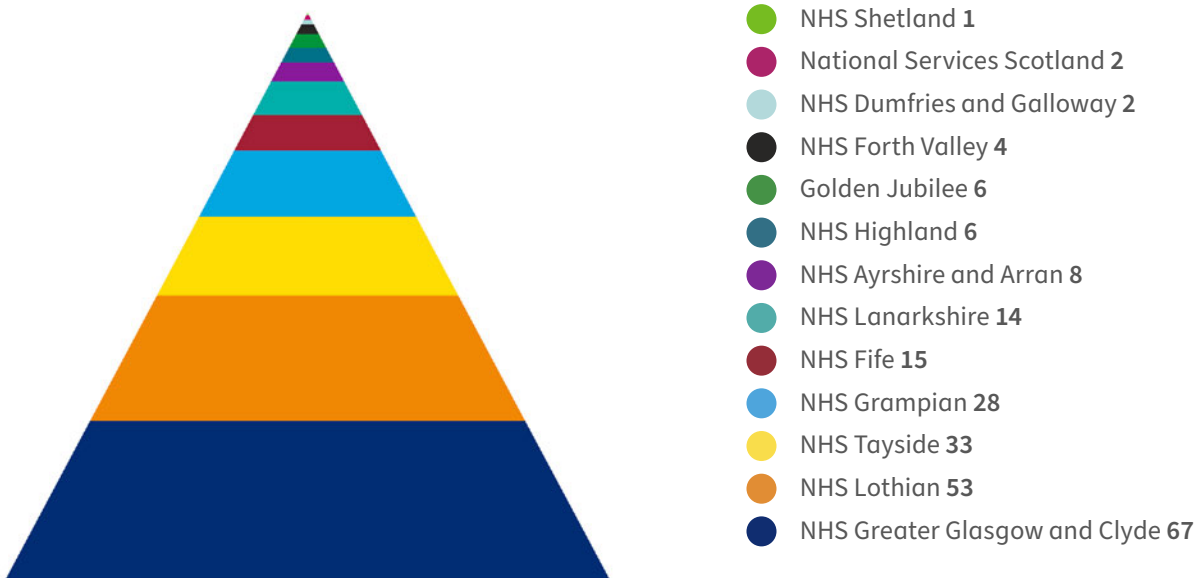


Figure 10: NTN holders within each Health Board across Scotland

These trainees come from a variety of specialties, as shown in Figure 11 below, illustrating the number of trainees within each specialty.

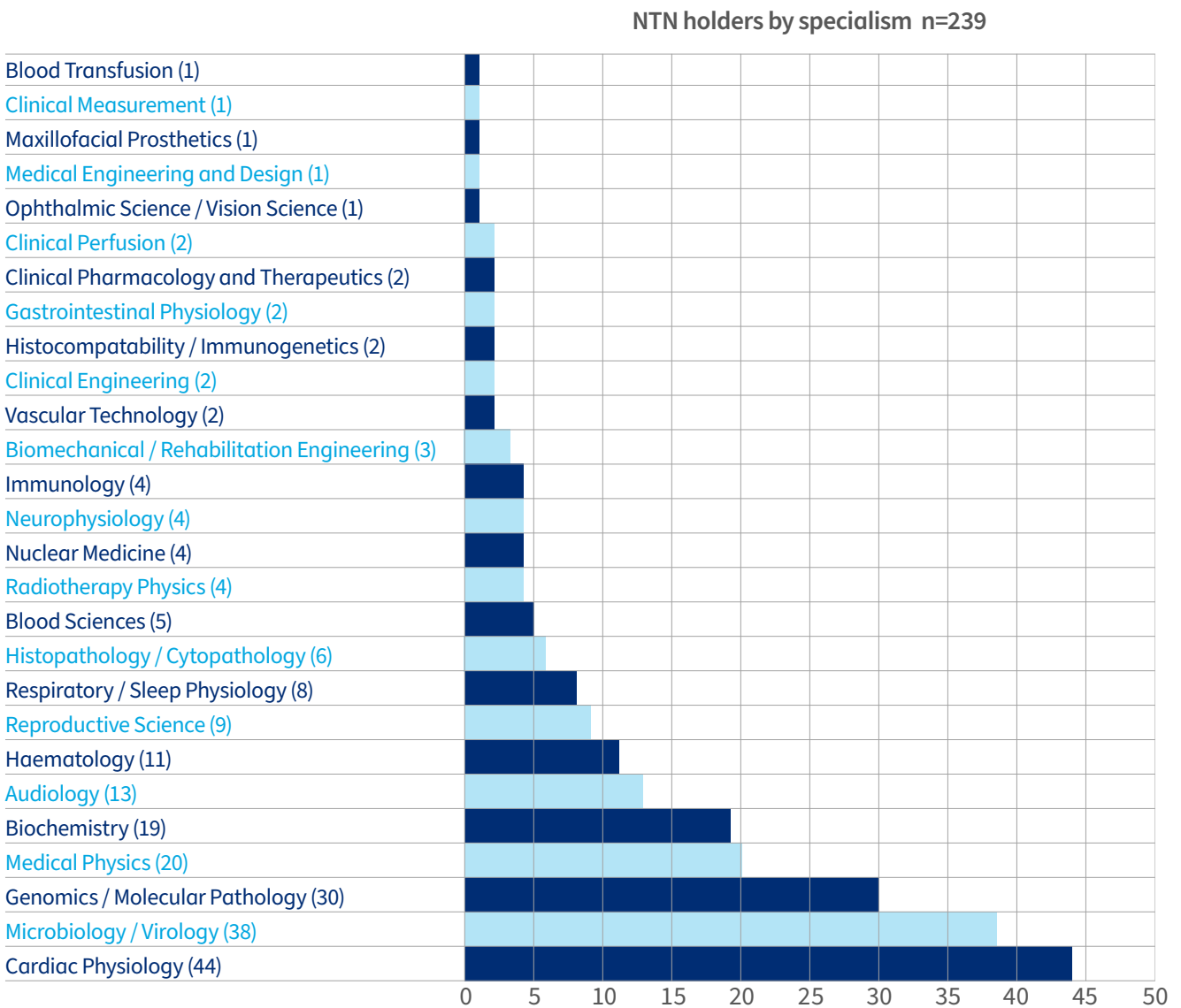


Figure 11: NTN holders within each specialism

HCS training includes several pathways, from practitioner to higher specialist levels. Keeping accurate data on these pathways and the number of trainees completing them is important for workforce planning and future funding decisions. The graph below shows the number of trainees completing each training pathway.

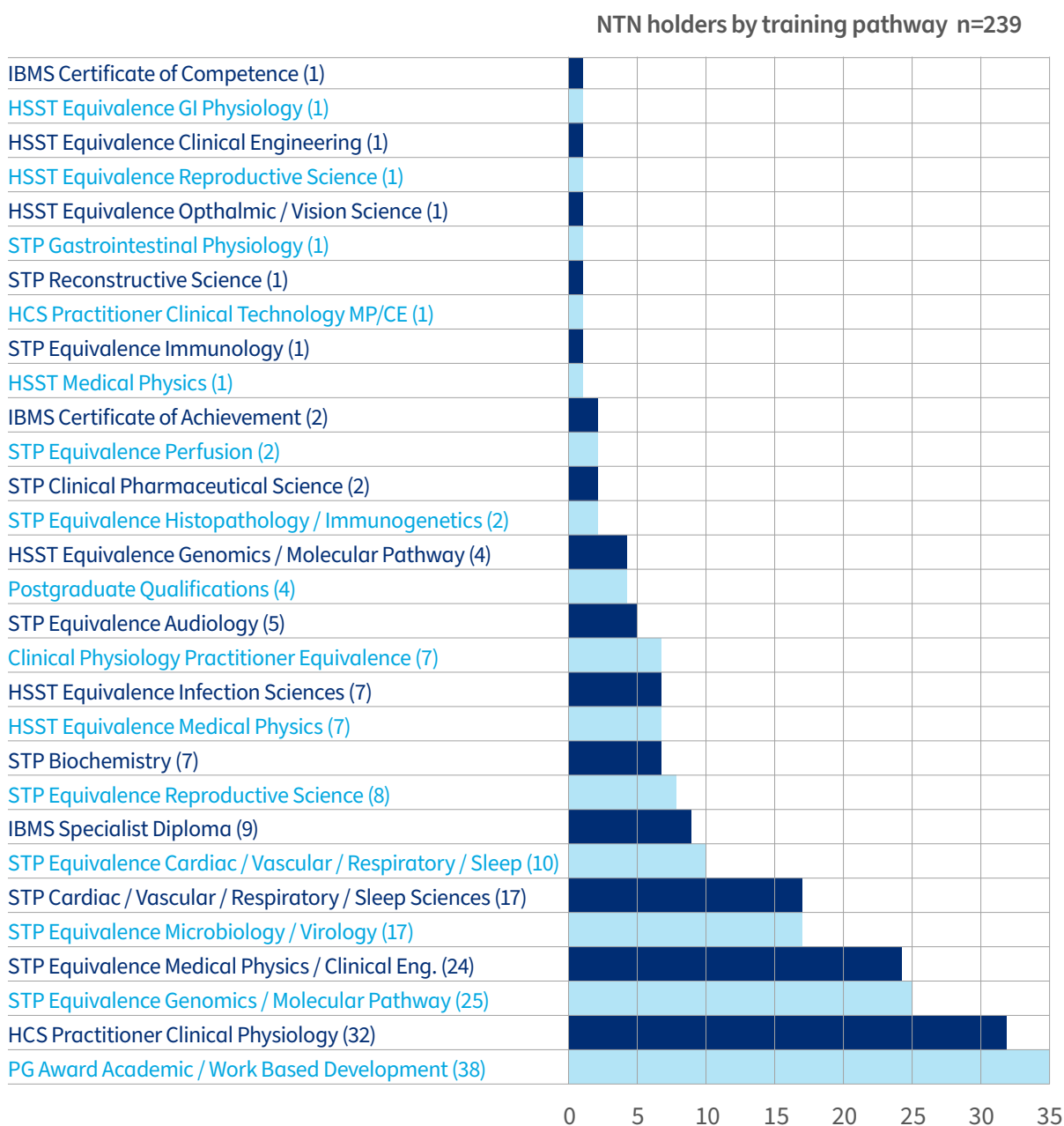


Figure 12: NTN holders per training pathway

Among the **123** Clinical Scientist trainees in Scotland, **28** (23%) are enrolled in a Scientist Training Programme (STP), while **95** (77%) are following an equivalence or Scottish Training Programme, covering various specialties, as shown in Figure 13.

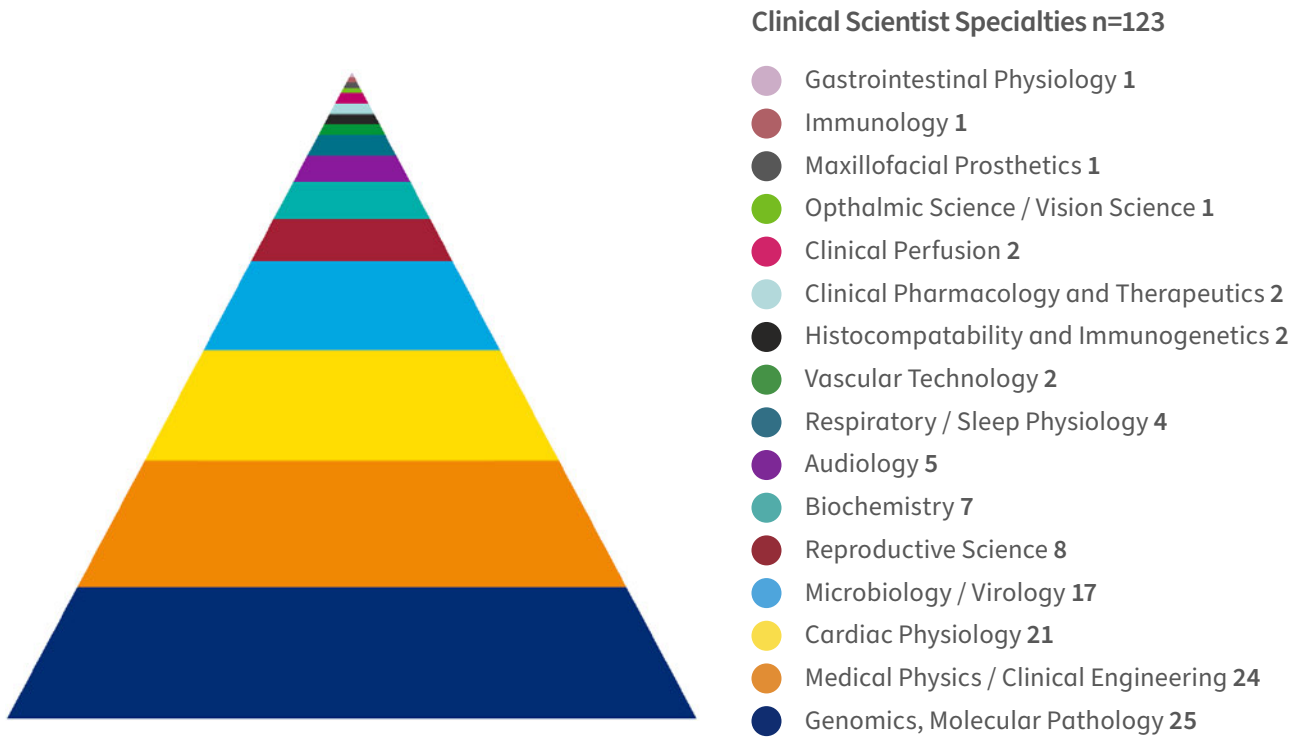


Figure 13: Clinical Scientist trainees per specialism

The 39 Clinical Physiology Practitioner Trainees, including 7 following an equivalence route, represent various specialisms, as illustrated in Figure 14.

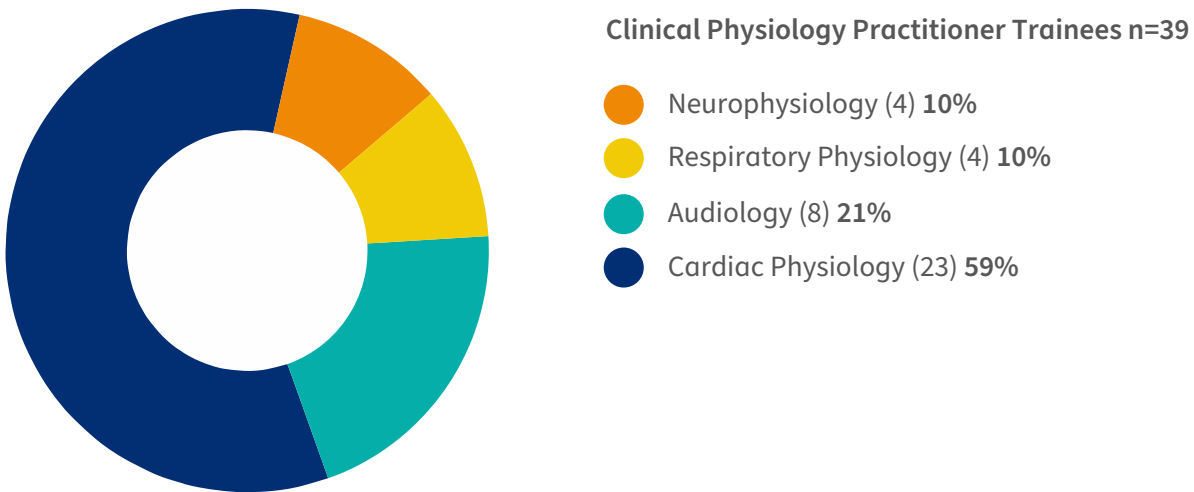


Figure 14: Clinical Physiology practitioners per specialism

We welcome discussions with any specialty that feels under-represented in our QA processes and trainee monitoring efforts. Your feedback is valuable in ensuring comprehensive and inclusive training pathways.



For full details on the NTN process, please visit [NTN information](https://hcstraining.nhs.scot/quality-assurance/national-training-number-ntn) (hcstraining.nhs.scot/quality-assurance/national-training-number-ntn)

Training plans

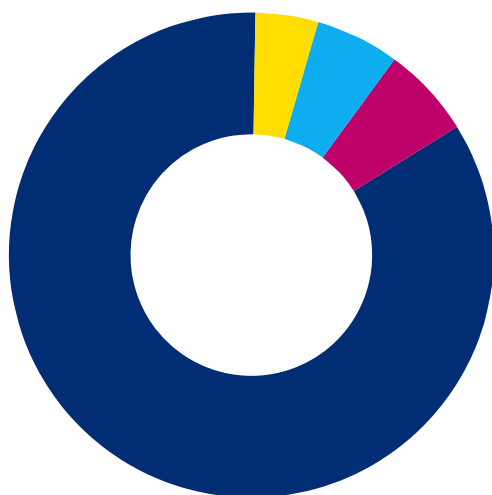
Within the first 3 months of a trainee being in their position, and then annually, the NES HCS team requires a training plan to be submitted.

This training plan serves to communicate expectations of the trainees, supervisors, and departments while also establishing a training schedule for evaluation of any issues or delays to be monitored against.

In September 2023, 214 trainees with NTNs were requested to submit a training plan. Out of these requests, 180 trainees and their supervisors submitted a training plan. With further scrutiny training plans were not applicable for 13 trainees, giving a 90.2% return rate for eligible trainees.

Of the 21 who did not complete training plans there was only 9 cases (4% of the overall eligible requests) where NES received no communication.

Training plan breakdown	%
Training plans completed	84
Training plans not applicable	6
Training plan non-completion with communication	6
Training plan non-completion with no communication	4



Training plans n=214

- Training plan non-completion with no communication (9) 4%
- Training plan non-completion with communication (12) 6%
- Training plans not applicable (13) 6%
- Training plans completed (180) 84%

Figure 27: Breakdown of responses to training plan requests

Progression of training Annual Review of Competency Progression (ARCP)

The NES Healthcare Science team actively collects annual progression reports for all trainees monitored through our Turas TPM system.

These reports are crucial for identifying and addressing any challenges early, allowing us to provide timely support to trainees, supervisors, or training centres, in accordance with our Special Measures policy.

Supervisors of trainees with NTN who have been in their positions for over a year are requested to complete the Annual Review of Competency Progression (ARCP) process with their trainees. This year, we transitioned to a continuous review model, moving away

from the previous year-end snapshot assessments. This shift enables ongoing evaluation of training quality across all training centres. In response to feedback from the previous year's QA process, we now directly engage with supervisors to ensure a more effective and responsive approach.

Implementing a continuous review model for ARCP has been successful, achieving a high completion rate of **90.1%** for scheduled ARCP processes. This approach has increased the responsiveness and effectiveness of the ARCP process, with direct engagement from supervisors enhancing the quality and timeliness of evaluations.

In total, **185** ARCP processes were scheduled, as illustrated in Figure 17.

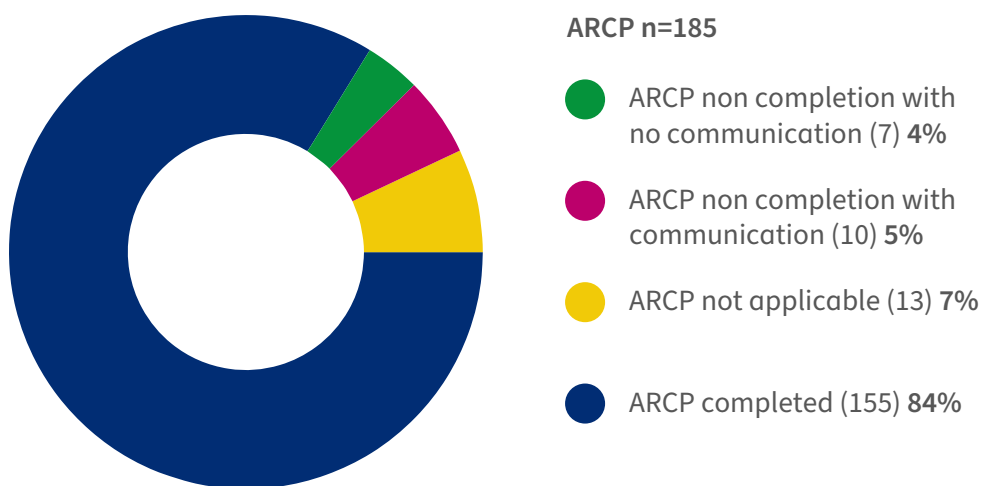


Figure 17: Responses to ARCP requests

Of the ARCP requests, 13 were deemed not applicable for various reasons, detailed in Figure 18.

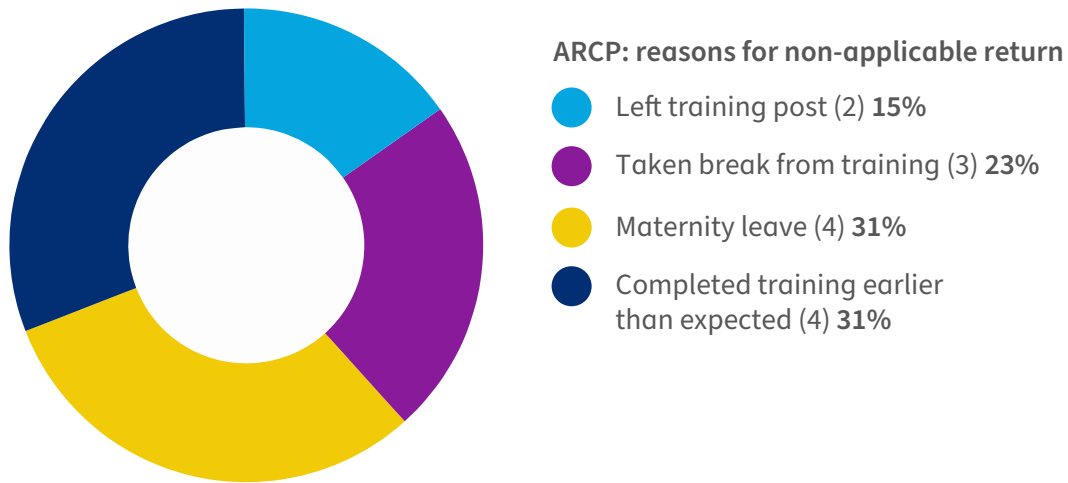


Figure 18: Reasoning for ARCP requests to be deemed as non-applicable

Applicable ARCPs spanned a range of specialisms and Health Boards across Scotland, as shown in Figures 19 and 20.

ARCP by specialism

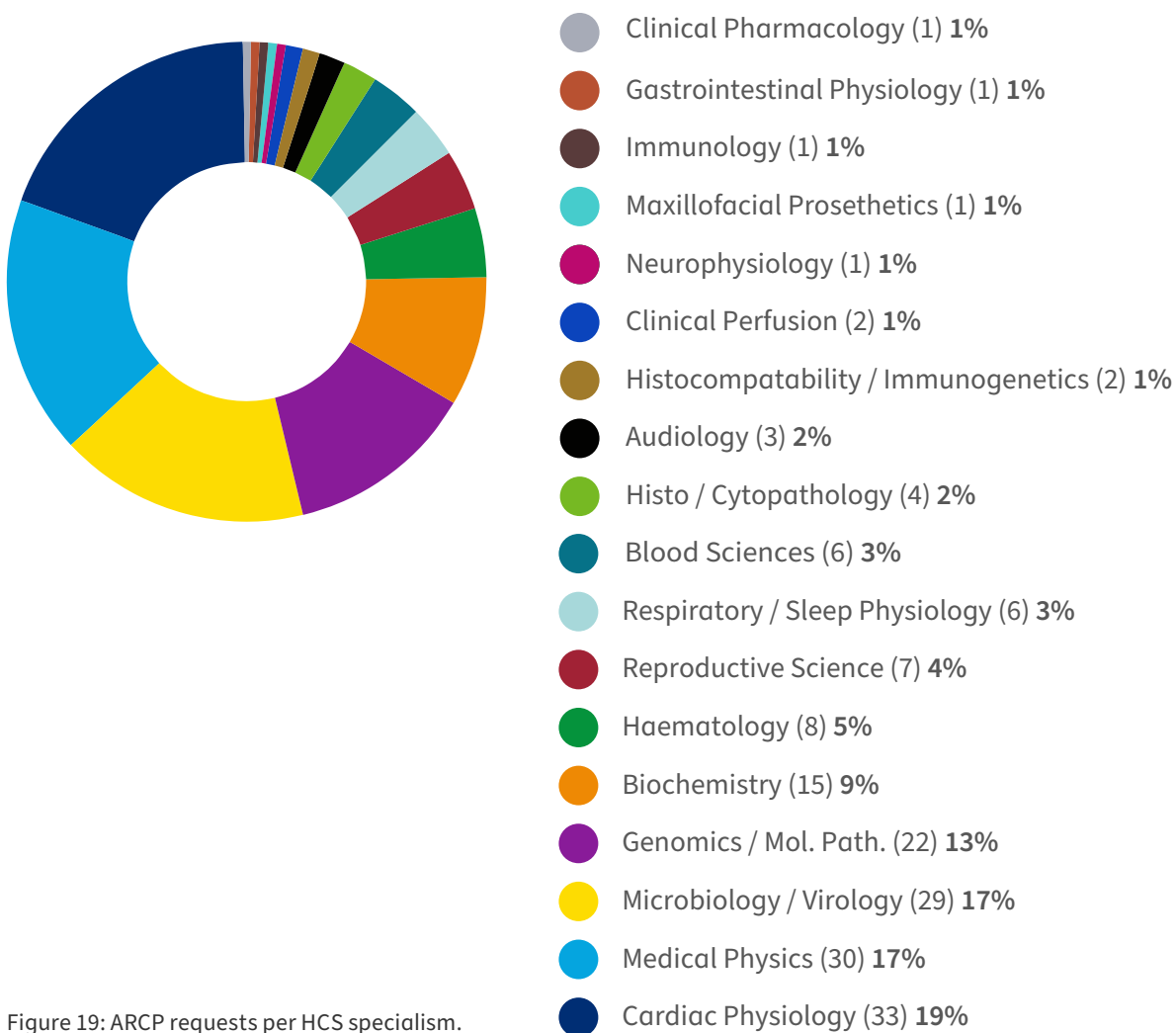


Figure 19: ARCP requests per HCS specialism.

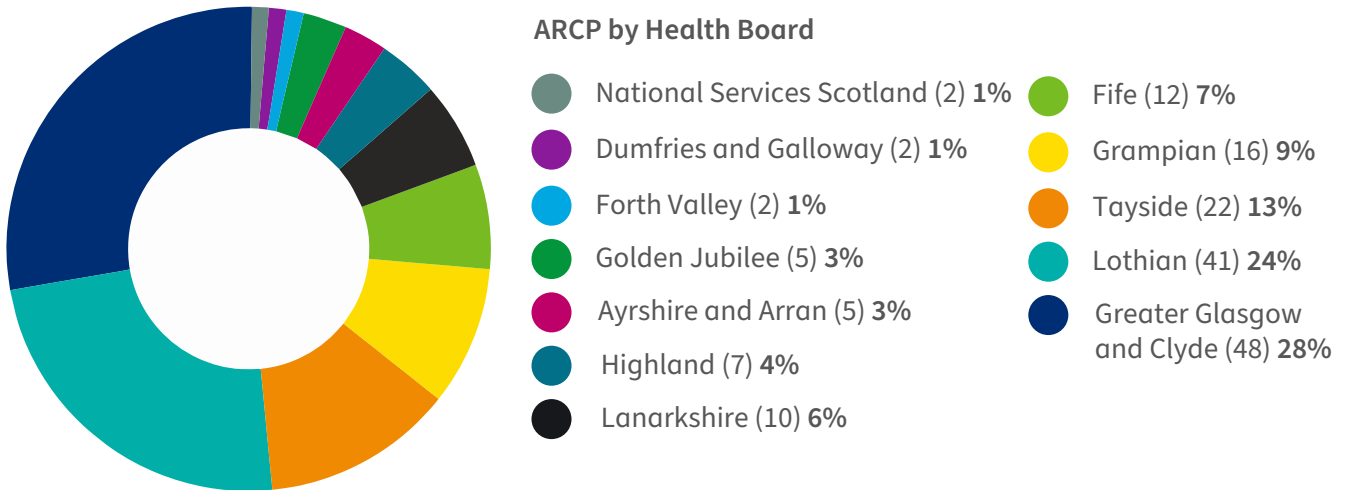


Figure 20: ARCP requests per Health Board across Scotland

ARCPs were also requested from trainees within various training levels (Figure 21).

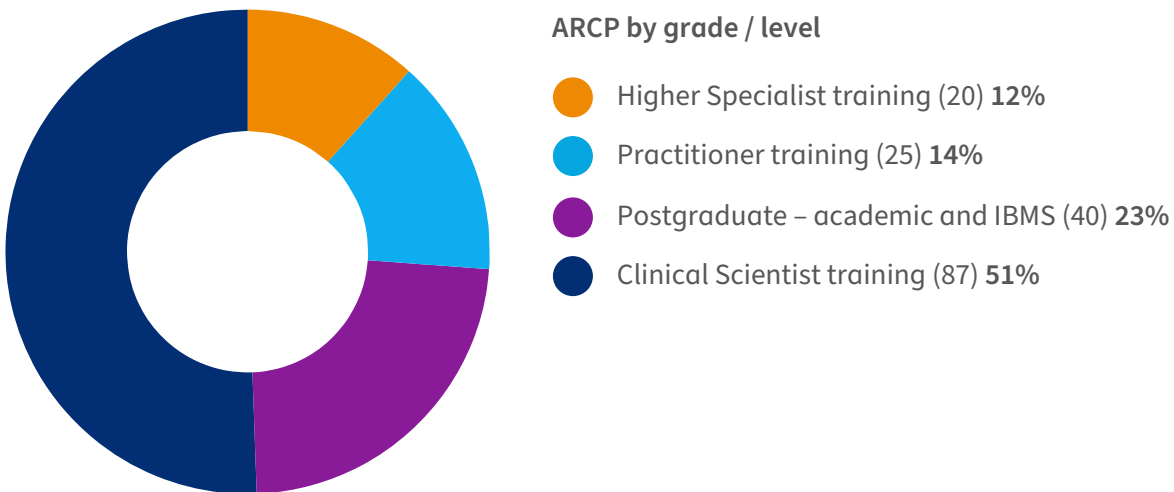


Figure 21: ARCP requests per grade/ level of training

Of the 17 supervisors who did not complete the ARCP, various Health Boards and specialisms were represented.

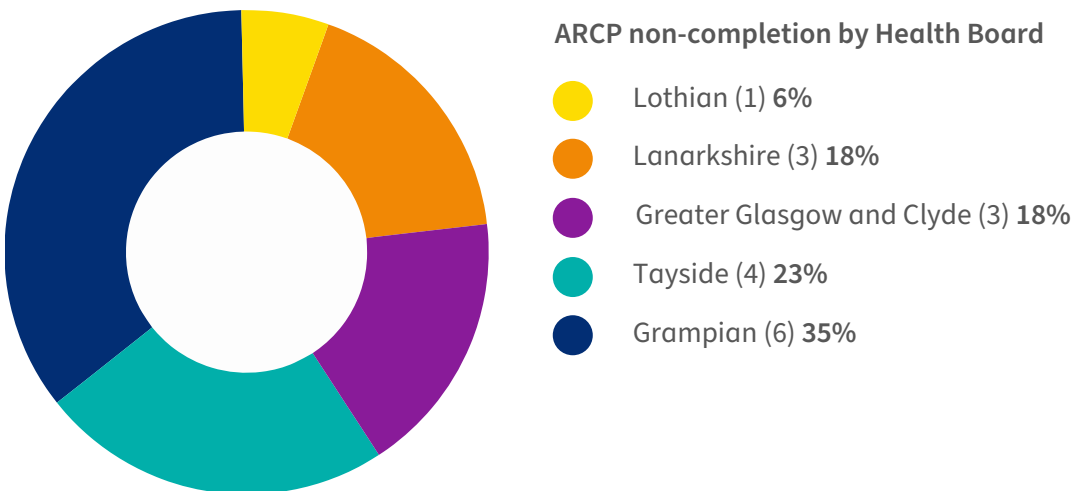


Figure 22: ARCP non-completion by Health Board



ARCP non-completion by specialism

- Medical Physics (1) 6%
- Audiology (2) 12%
- Genomics / Mol. Path. (2) 12%
- Haematology (3) 18%
- Cardiac Physiology (4) 23%
- Medical Microbiology / Virology (5) 29%

Figure 23: ARCP non-completion by specialism



ARCP non-completion by training type

- Practitioner Trainee Physiology (2) 12%
- HSST (2) 12%
- Postgraduate studies (4) 23%
- Clinical Scientist training (9) 53%

Figure 24: ARCP non-completion by training type

Although non-response has been evaluated, with the majority of non-responses coming from Clinical Scientist trainees, the small numbers make it difficult to draw conclusions on trends.

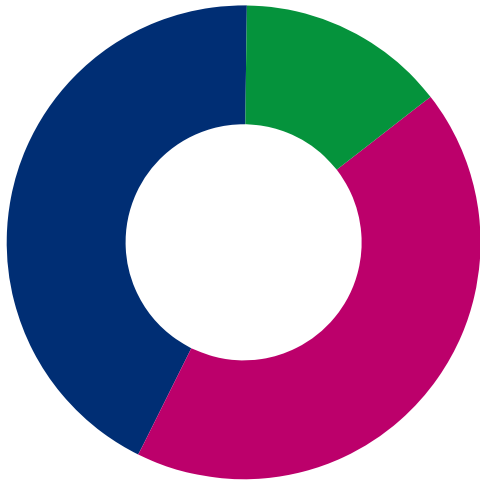
Although 17 ARCPs were not completed, these trainees were being overseen by 12 individual supervisors, 7 of which communicated with NES to explain their reasons and request

timeline extensions. These reasons included trainee transfers between Health Boards and absences of trainees or supervisors. However, no communication was received from 5 supervisors, raising concerns.

As can be seen in Figure 25, the number of specialities not completing the ARCP process and not communicating with NES is low.



NES will continue to engage with these supervisors in the next QA cycle to ensure the training is proceeding as planned, and there are no issues which may require our assistance.



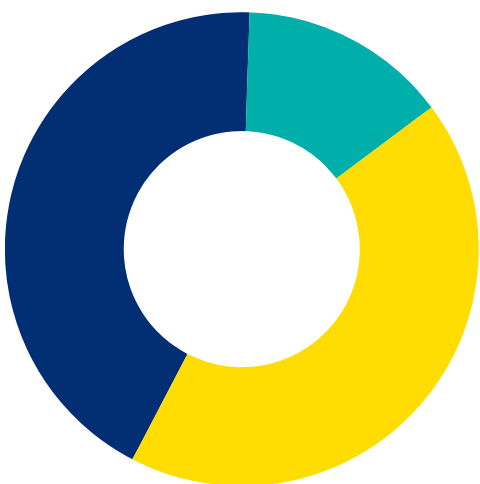
ARCP non-completion with no communication by specialism

- Medical Physics (1) 14%
- Haematology (3) 43%
- Medical Microbiology / Virology (3) 43%

Figure 25: Number of ARCPs not completed with no communication by specialism

The ARCP responses indicated positive progression for 86% of respondents, with these trainees developing their abilities at the expected rate. This is a strong indication of the effectiveness of the training programmes and support systems in place. Another 9% were making acceptable progress with minor difficulties. Concerns were raised for 7 trainees, an increase from the previous year. Issues included significant time out of programme and slower-than-expected competency development, prompting supported improvement processes.

Additionally, 9% of trainees had significant time out of programme in the past year, with another 3.9% expected to be out of programme in the coming year. The NES Healthcare Science team is working with training departments to provide necessary support and to implement the Special Measures Policy where required.



Rating of trainees' overall progress

- Concerns raised (7) 5%
- Acceptable - minor problems with some specific competencies / areas (14) 9%
- Good - Achieving progress and competencies at the expected rate (134) 86%

Figure 26: ARCP ratings of the trainees' overall progress within this QA year



The conclusion of this year's quality monitoring indicates that we can be assured that the state of training, where it is being delivered, is broadly sound. More information on our ARCP process can be found on the [Healthcare Science website \(hcstraining.nhs.scot/quality-assurance/exit-survey\)](https://www.hcstraining.nhs.scot/quality-assurance/exit-survey).

Training Centre Recognition

NES HCS requires all centres hosting HCS trainees to complete our Training Centre Recognition process. This process evaluates centres against comprehensive standards aligned with the HCPC Standards of Education and Training.

While some specialisms may also receive accreditation from bodies such as the United Kingdom Accreditation Service (UKAS), the Institute of Biomedical Science (IBMS), or other regulatory entities, it is crucial for all to engage with NES's Training Centre Recognition process. This ensures NES can uphold consistent training quality across all HCS disciplines.

Training centre accreditation is vital in maintaining high standards and ensuring uniformity in HCS training across Scotland. It ensures that education standards are met and consistently upheld. Moreover, accreditation plays a pivotal role in fostering continuous improvement in HCS education and training.

By engaging with the accreditation process, training centres commit to ongoing evaluation and enhancement of their training programmes, ultimately contributing to the advancement of HCS practice and patient care standards.

The Training Centre Recognition process is currently under review as part of the ongoing transformation within NES. By collaborating with other directorates, we aim to further enhance and streamline this process, ensuring it remains effective and relevant.

Our goal is to work closely with each training centre to ensure trainees receive the best possible training, ultimately benefiting patient care. We are grateful for the substantial participation in this process, which has enabled us to increase the number of accredited training centres.

As of 31 March 2024

NES HCS has accredited **70** training centres and training consortiums

covering a diverse array of specialties.



Since March 2023

there has been an increase of **7** accredited training centres within Clinical Physiology, including **4** in Audiology and **3** in Cardiac Physiology.

Additionally

23 training centres are currently undergoing the accreditation process and are at various stages, from initial contact to evidence gathering.



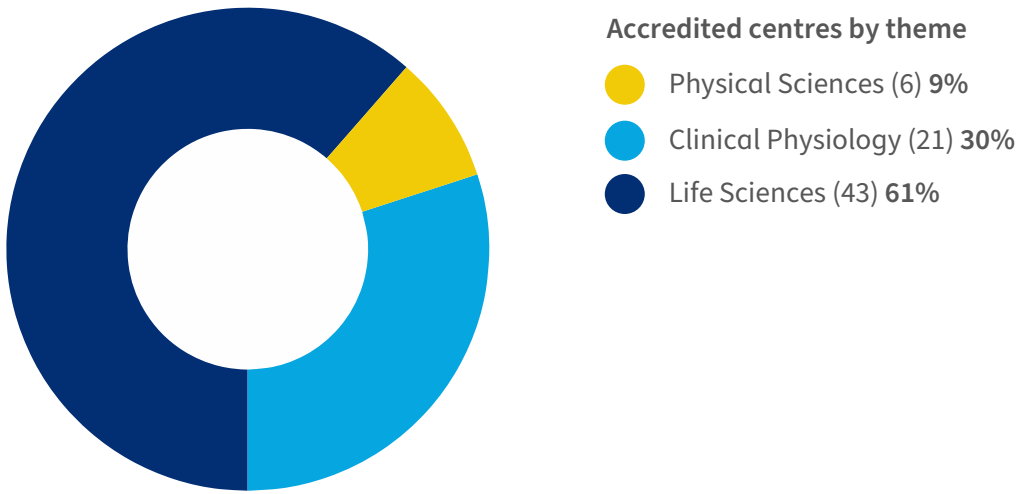


Figure 15: Accredited training centres by HCS theme

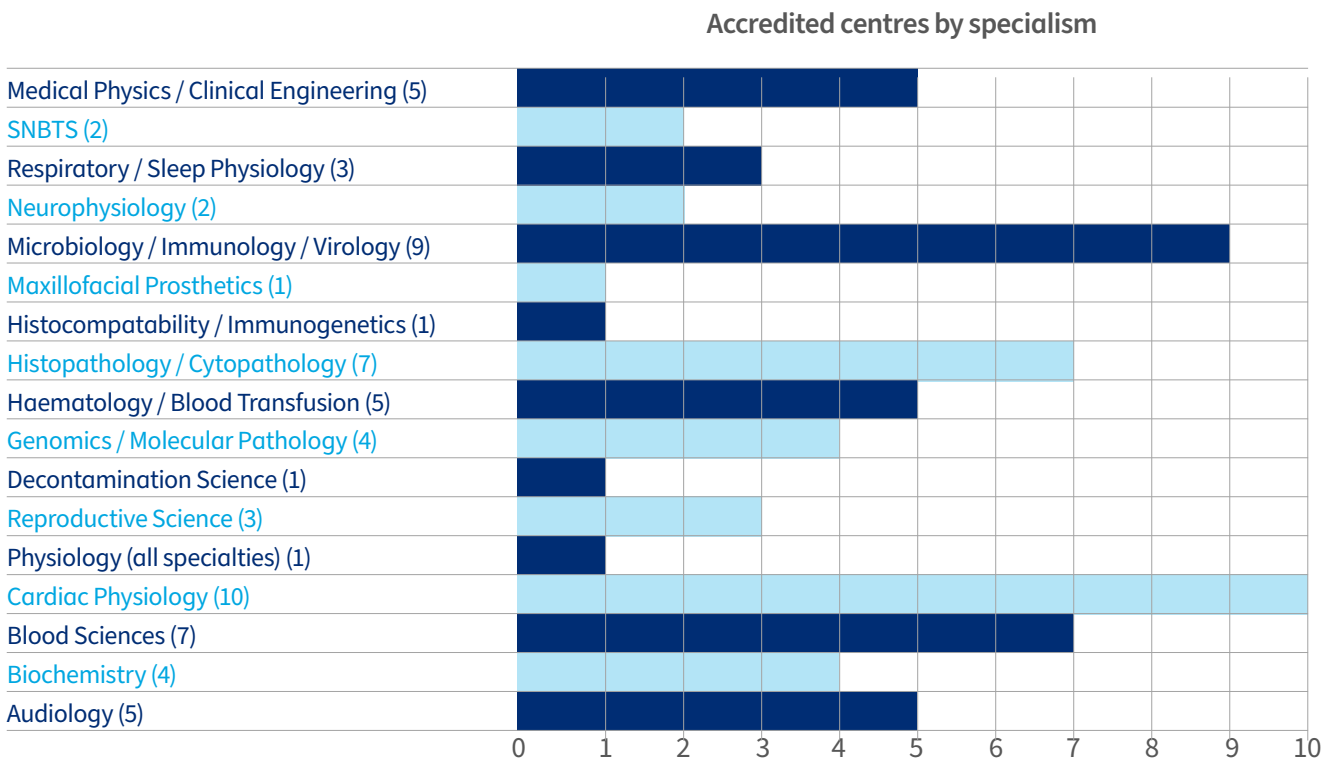


Figure 16: Accredited training centres by specialism

By maintaining rigorous accreditation standards and fostering continuous improvement, NES aims to ensure that all HCS trainees in Scotland receive the highest quality of training, ultimately benefiting patient care. Accreditation is valid for 4 years. However, we encourage ongoing communication with the NES team regarding any

significant or minor changes that could impact centre accreditation. During this period, the NES team is available to answer questions about training quality and provide advice or assistance to enhance the standard of training provided. We welcome any feedback on potential improvements to the process.



For more information please visit [Training Centre Accreditation process \(hcstraining.nhs.scot/quality-assurance/training-centre-recognition\)](https://hcstraining.nhs.scot/quality-assurance/training-centre-recognition)

Exit survey

The NES Healthcare Science team monitors all trainees until they complete their programmes using the Turas Training Programme Management (TPM) System.

Upon completion, we request information on the employment status of all trainees.

This serves 3 main purposes:

- + To ensure the successful completion of the training programme
- + To gather feedback
- + To review the post-training employment status of trainees

This information helps NES Healthcare Science identify issues with training programmes and informs the allocation of funding for future trainees.

This year, the NES HCS team closely liaised with trainees during their final training period to maintain a continuous record of their progress. Only those who completed their training were asked to complete the exit survey, while those who had not finished by the end of the financial year will be surveyed in the next QA cycle.

Exit survey 2023

80 trainees who completed their training within this financial year were asked to complete the survey.

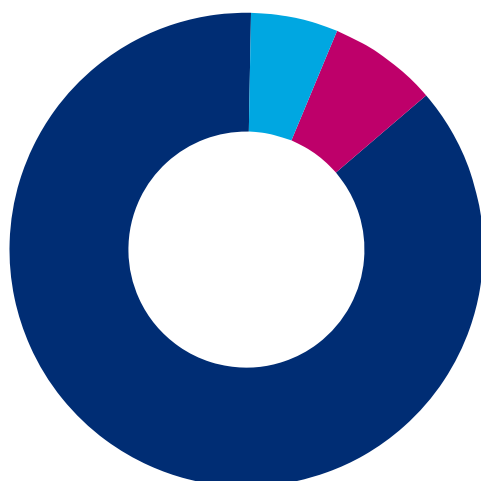
67 completed the survey, resulting in a response rate of **84%**

Among the respondents:

- + **58** completed their training on time (86.6%)
- + **5** finished beyond the expected endpoint (7.5%)

Trainees that left the programme prior to completion:

- + **1** left for personal reasons
- + **3** left for alternative NHS positions (2 trainees intend to complete their training in a different NHS setting)



Trainee status from Exit survey n=67

- Left training prior to completion (4) 6%
- Completed training outwith scheduled time (5) 7%
- Completed training on schedule (58) 87%

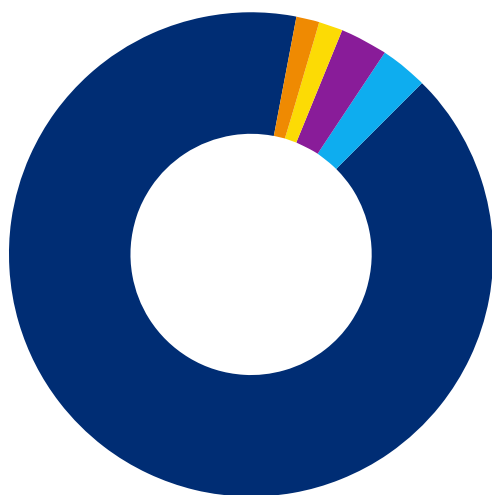
Figure 28: Trainee status from exit survey

There were 37 trainees who expected to complete their training this year but experienced delays, and thus were not surveyed. This marks a significant increase from the previous year's 8 delayed trainees. Reasons for delays included time out of programme, and personal issues.

Of the 37 delayed trainees, 31 are completing an equivalence process, and reasons for delays in this cohort include delays to the process, both within the ACS, and the AHCS, and difficulties in completing these processes. NES is

actively engaging with both ACS and AHCS to attempt to address these delays and to offer assistance where possible.

Post-training, 57 trainees (90%) remained in their training centres, 4 (6%) secured positions within NHSScotland, 1 moved to NHS England, and 1 took a position outside the NHS. This results in a retention rate of 97% for those who responded to the survey. While the exact status of non-respondents is unclear, directory entries suggest they are still employed within NHSScotland.



Employment status of completed trainees n=63

- Working outwith the NHS (1) 2%
- Working elsewhere in UK within NHS (1) 2%
- Working elsewhere in NHSScotland (2) 3%
- Working elsewhere within same Health Board (2) 3%
- Continuing to work in same department (57) 90%

Figure 29: Employment status of trainees who completed the exit survey

For trainees who left their departments, reasons included the lack of substantive positions (4 trainees), offers of preferable positions elsewhere (4 trainees), and personal reasons (2 trainees).

Trainees provided feedback on their training programmes, with 87% indicating they felt their training was well-structured. However, 24% reported difficulties, highlighting areas for improvement. Reasons cited for these difficulties included COVID-19 restrictions (4), issues with supervision (2), heavy workload (1), insufficient academic support (1), limited support

for organising rotations (1), a shortage of examiners (1), and NHS staff's understanding and confidence in academic content (1).

Additionally, trainees who completed an equivalence process were asked about their experiences and outcomes. Various external agencies were involved in the equivalence process, as seen in Figure 30. There were 17 trainees that completed equivalence, with 14 facing no significant issues. However, 3 trainees (17.6%) were asked for additional evidence at either the portfolio or viva stage.



External body / Equivalence assessor

- AHCS (Higher Specialist Scientist Equivalence) (1) 6%
- AHCS (Practitioner Equivalence) (1) 6%
- British Academy of Audiology (2) 12%
- AHCS (Clinical Scientist Equivalence) (6) 35%
- ACS (Clinical Scientist Equivalence) (7) 41%

Figure 30: External bodies involved in the assessment of Equivalence



Initial application outcome

- Supplementary portfolio evidence requested and submitted (1) 6%
- Higher Specialist application accepted through CV only with no portfolio requested (1) 6%
- Supplementary evidence requested and submitted post viva (2) 12%
- Approved portfolio evidence – full assessment completed and registration achieved (13) 76%

Figure 31: Equivalence outcome for trainees who completed an Equivalence process

The exit survey results underscore the overall success and robustness of the HCS training programmes, as evidenced by the high completion and retention rates among trainees. However, significant issues such as training delays and various difficulties faced by trainees highlight the need for ongoing improvements.

The survey feedback will be instrumental in tailoring the recommendations and support provided by the NES HCS team, ensuring that future training programmes are better aligned with trainees' needs and challenges. The proactive engagement of NES HCS with relevant bodies and trainees reflects a commitment to continuous improvement and optimal utilisation of funding for future cohorts.



For more information on our exit survey process, please visit the [HCS training website](https://hcstraining.nhs.scot/quality-assurance/exit-survey) (hcstraining.nhs.scot/quality-assurance/exit-survey)