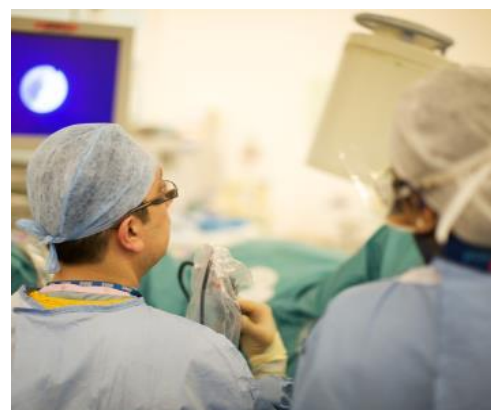


Scientist Training Programme Improvement Review, May 2018



By Dr Anna Grant, Dr Kathy Seymour & Professor Roger Murphy

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EXECUTIVE SUMMARY

Background

The National School of Healthcare Science commissioned *AlphaPlus*, an educational research consultancy, to undertake a review of the Scientist Training Programme (STP). The STP is a three-year post-graduate training programme for healthcare scientists currently covering 32 specialties. The STP was established in 2011 and, since its inception, approximately 1,200 trainees have successfully completed the programme.

The review was conducted between September 2017 and February 2018, and is the first full review of the programme. The review has provided an opportunity for all major stakeholder groups to share their views on the strengths and shortcomings of the programme, and their thoughts on the ways in which the STP design, structure and delivery might be refined and further developed.

Phases of the review

The review involved three consecutive phases, with each phase using a different method to elicit stakeholders' views and experiences of the STP, and ideas about potential improvements.

In **Phase 1**, semi-structured telephone interviews were undertaken with 33 volunteers from across five stakeholder groups: training officers, trainees, alumni, and representatives from Higher Education Institutions (HEIs) and professional bodies.

In **Phase 2**, six focus groups were conducted with members of the NSHCS Themed Boards (two groups each for the Life Sciences, Physiological Sciences and Physical Sciences boards, incorporating members from Bioinformatics). In total, 52 board members participated, with representation across the same five stakeholder groups as Phase 1, and including public and patient representatives, and Health Education England Healthcare Science Leads.

In **Phase 3** an open access online survey was completed by over 1,000 respondents of the healthcare science community.

Findings

In Phases 1 and 2, many participants emphasised the crucial role of healthcare scientists within the UK healthcare system. Many also remarked that the STP was making an important contribution to strengthening the healthcare science workforce, and that healthcare science services in the UK are now depending heavily upon those graduating from the STP. Indeed, participants noted that STP graduates are seen as the lifeblood of modern healthcare science.

There is a widely held view that trainees receive quality training from senior healthcare scientists, who are seen as crucial to the continued success of the programme, and who demonstrate excellence in their specialist expertise and professional practice.

Across the three phases, the majority of participants were typically satisfied with the overall design of the STP – in terms of it being a three-year programme comprising blended academic and workplace-learning, with rotations and specialist training, and an assessment strategy comprising competencies, workplace-based assessment and the Objective Structured Final Assessment (OSFA). The current design appeared to meet the needs of most stakeholders and, as such, there was no real support for major changes to the fundamental features of the STP model.

There was, however, strong support for a number of changes regarding the delivery of the programme. Stakeholders requested greater flexibility in the organisation and delivery of the STP; to allow the standard delivery model to flex, where appropriate and possible, where there are known difficulties with a 'one size fits all' approach.

The participants of Phases 1 and 2 attached the highest priority for change on the rotations. There was strong support for a review of the content, organisation, quality and duration of the rotations, with a view to enhancing the educational value, flexibility and choice of rotations. In addition, participants noted a need to improve the consistency of trainees' experiences and the support available for training officers.

The Phase 3 participants attached the highest priority for change to 1) a review of specialist competencies, 2) improving the coordination between the academic and workplace learning, and 3) enhancing training opportunities for those providing or assessing the training.

Recommendations

The recommendations of the review are as follows:

1. There is a need to incorporate greater flexibility in how STP training is delivered.
2. The provision of training by the NSHCS for training officers, workplace-based assessors and reviewers, and OSFA assessors, while satisfactory, should be improved in order to achieve better consistency of experience and outcomes for all STP trainees.
3. Specialist competencies should be reviewed and rewritten, or reconceptualised, as required, to ensure they reflect current scientific practice and are clear to trainees and training officers.

4. Rotations should be reviewed with a view to ensuring they have educational value, are deliverable, and flexible. This has several elements, with a need to review rotation content, choice, organisation, duration and assessment.
5. There is a need to identify ways of improving the coordination of academic and workplace learning,
6. There is a need to support the development of training consortia and regional-based approaches to training.
7. There is a need to review and improve the consistency of learner experience across the programme.

1. INTRODUCTION

1.1 Background

The Scientist Training Programme (STP) is a three-year post-graduate training programme that blends academic and workplace-based learning and leads to registration with the Health and Care Professions Council as a Clinical Scientist. The STP has been running since 2011, with approximately 1,200 trainees having completed the programme so far. There are currently 32 science specialties included in the programme clustered within four scientific themes: Bioinformatics, Life Sciences, Physical Sciences and Physiological Sciences.

This improvement review was prompted by feedback from STP stakeholders to the NSHCS that elements of the programme were in need of review and change. The NSHCS responded to the feedback by commissioning the review and committing to acting on the evidence of the review. The main purpose of the review has been to assess whether there are quality improvements that could be made to the design and structure of the STP to enhance its delivery and effectiveness in training healthcare scientists. The overarching aim of any subsequent changes to the programme would be to ensure that the STP design meets current conceptions of best practice in professional vocational training, offers a quality training experience for trainees, and continues to meet the needs of the healthcare science workforce.

The scope of the STP Improvement Review was developed by a NSHCS steering group comprising internal and external STP stakeholders, in collaboration with *AlphaPlus*.

1.2 Scope of review and approach

The main purpose of the STP improvement review was to assess whether quality improvements could be made to the design and structure of the STP to enhance its delivery, efficiency and effectiveness in training clinical scientists. The emphasis on 'design and structure' includes, as examples:

- Delivery model options e.g. accelerated routes, part-time pathways
- The inclusion, number and duration of rotations
- The use, timing and design of the Objective Structured Final Assessment (OSFA)
- The scheduling of the academic and specialist workplace learning

The review has provided an opportunity for all major stakeholder groups to offer their views on the strengths and shortcomings of the programme and their opinions on the ways in

which the STP design, structure and delivery might be refined and further developed. Over 1,100 stakeholders participated in the review across the three phases.

The *AlphaPlus* research team worked closely with the NSHCS Steering Group from the inception of the review, through to reporting, whilst maintaining its independence. The research team sought the Steering Group's feedback on draft research instruments to ensure that all relevant areas and questions were covered. Also, the field research and sampling strategy were discussed and agreed between *AlphaPlus* and the Steering Group.

This report brings together the main findings from the three phases of the research, placing the greatest emphasis on the Phase 3 Survey findings, which represent the views of over 1,000 respondents.

2. PHASES OF THE REVIEW

2.1 Phase 1: Telephone interviews

Phase 1 was conducted in October 2017 and comprised semi-structured telephone interviews with 33 stakeholders. To support recruitment of participants, the NSHCS sent an email to all stakeholders on the NSHCS database to inform them of the telephone interviews and inviting interested individuals to contact *AlphaPlus* direct.

The interview questions focused on:

- The extent and type of participants' involvement in the STP
- Their views on specific aspects of STP design, including the organisation and delivery of the curricula, assessment, the rotations, academic learning and workplace-based learning
- Overall perceptions of STP
- Participants' ideas for potential improvements

2.2 Phase 2: Focus Group discussions

For Phase 2, a total of six focus groups were convened at three Themed Board meetings in November 2017 (two focus groups per Themed Board meeting, incorporating representation for Bioinformatics). Themed Boards are part of the NSHCS governance structure and include representatives from the major stakeholder groups.

The participant numbers per theme were as follows:

- Life Sciences: 14
- Physical Sciences (incorporating Bioinformatics): 17
- Physiological Sciences: 21

Each focus group was facilitated by two researchers and followed the same discussion schedule to ensure a standardised approach across the six groups. Each focus group completed the following exercises:

- an opening activity to gather participants' views and experiences of the strengths and shortcomings of the STP design and structure
- An in-depth discussion to explore participants' wish-list of essential elements for an effective training programme for healthcare scientists.
- A sharing of ideas and the rationales for potential changes to improve the design and structure of the STP.
- Sorting potential changes in to a rank order of priority for suggested action and implementation.

2.3 Phase 3: Online survey

The third and final phase of the review involved an online survey. The purpose of the survey was to measure support for the range of views and change ideas expressed during Phases 1 and 2, among a national sample. The survey was open access, meaning that the survey could be completed by any member of the healthcare science community. All responses were anonymous.

The survey was live for one month, between 4th January and 4th February, 2018. There were several channels through which the link to the survey was distributed and promoted. These included emails from the NSHCS directly to stakeholders inviting them to complete the survey, an announcement on the NSHCS website, promotion on Twitter, articles in newsletters, dissemination through relevant professional bodies, inclusion of the survey link in NSHCS email signatures, and by utilising other professional networks e.g. Health Education England's Healthcare Science Leads. All those contacted were asked to forward the survey invitation to relevant colleagues as well as completing it themselves.

The survey was designed jointly by the *AlphaPlus* team and representatives of the STP Steering Group based on the findings from Phases 1 and 2, and covered the following topics:

- Rotations
- Competencies
- Assessment
- Specialist training
- Programme delivery models

The use of an open access approach ensured that all members of the healthcare science community were able to complete the survey if they wished, including those not on any of the NSHCS stakeholder databases. However, there are two limitations with this approach:

- 1) It is not possible to gauge the survey response rate as the size of the population from which the sample responded is not known (the survey link was sent by the NSHCS to 3,792 individuals via email);
- 2) There is no 'save and return' function for open access surveys. This means that the dataset contains 'false starts', partial completions and double responses to some items.

The survey dataset comprised 1,021 full responses and 106 partial responses.

3. SURVEY RESPONDENT CHARACTERISTICS

As part of the Phase 3 survey, respondents were asked to answer a number of classification questions. This was intended to facilitate data analysis by key characteristics so that responses by the different stakeholder groups could be explored.

Two characteristics were selected for inclusion in the analysis of the survey findings. These were respondents' specialty (Table 1) and respondents' main role in relation to the STP (Table 2). In order to present the survey findings by the relevant background characteristics of respondents, the analysis process involved aggregating the various roles into four larger sub-sets (Table 3). Similarly, to facilitate a more meaningful analysis of the data, the specialties were collapsed into the four main 'themes' (Table 4). Survey results by these two characteristics are presented in the Appendix.

Table 1. Responses by specialty.

Specialism	n	%
Responsible for multiple sciences	8	1
Audiology	68	7
Cardiac Science	63	7
Clinical Biochemistry	96	10
Clinical Bioinformatics – Genomics	32	3
Clinical Bioinformatics – Health Informatics	4	0
Clinical Bioinformatics – Physical Sciences	9	1
Clinical Immunology	17	2
Clinical Measurement & Development	5	1
Clinical Pharmaceutical Science	12	1
Critical Care Science	6	1
Cytopathology	2	0
Gastrointestinal Physiology	9	1
Genomic Counselling	26	3
Genomics (Genomic Science)	88	9
Haematology and Transfusion Science	21	2
Histocompatibility & Immunogenetics	12	1
Histopathology	13	1
Imaging (ionising radiation)	74	8
Imaging (non-ionising radiation)	26	3
Medical Device Risk Management & Governance	6	1
Microbiology	30	3
Neurophysiology	25	3
Ophthalmic & Vision Sciences	1	0
Physical Sciences & Biomedical Engineering	4	0
Radiation Safety Physics	26	3
Radiotherapy Physics	123	13
Reconstructive Science	5	1
Rehabilitation Engineering	25	3
Reproductive Science	52	5
Respiratory & Sleep Sciences	19	2
Urodynamic Science	2	0
Vascular Science	37	4
Not applicable	6	1
Other	10	1
Total	962	100

Table 2. Responses by STP role.

Role	n	%
Trainee – Year 1	128	13
Trainee – Year 2	133	13
Trainee – Year 3	124	12
Alumni / past trainee	170	17
Training Officer	130	13
Training Supervisor	110	11
Workplace trainer	38	4
Workplace assessor	49	5
Healthcare Science Lead Commissioner	5	0
Lead Scientist	54	5
Professional body representative	16	2
HEI representative	9	1
Other	55	5
Total	1021	100

Table 3. Responses by STP role (aggregated).

Role (aggregated)	n	%
Trainees	555	54
Training and workplace representatives	327	32
Senior and HEI representatives	84	8
Other	55	5
Total	1021	100

Table 4. Responses by scientific theme.

Theme	n	%
Bioinformatics	45	5
Life Sciences	357	38
Physical Sciences	306	33
Physiological Sciences	230	25
Total	938	100

4. REVIEW FINDINGS

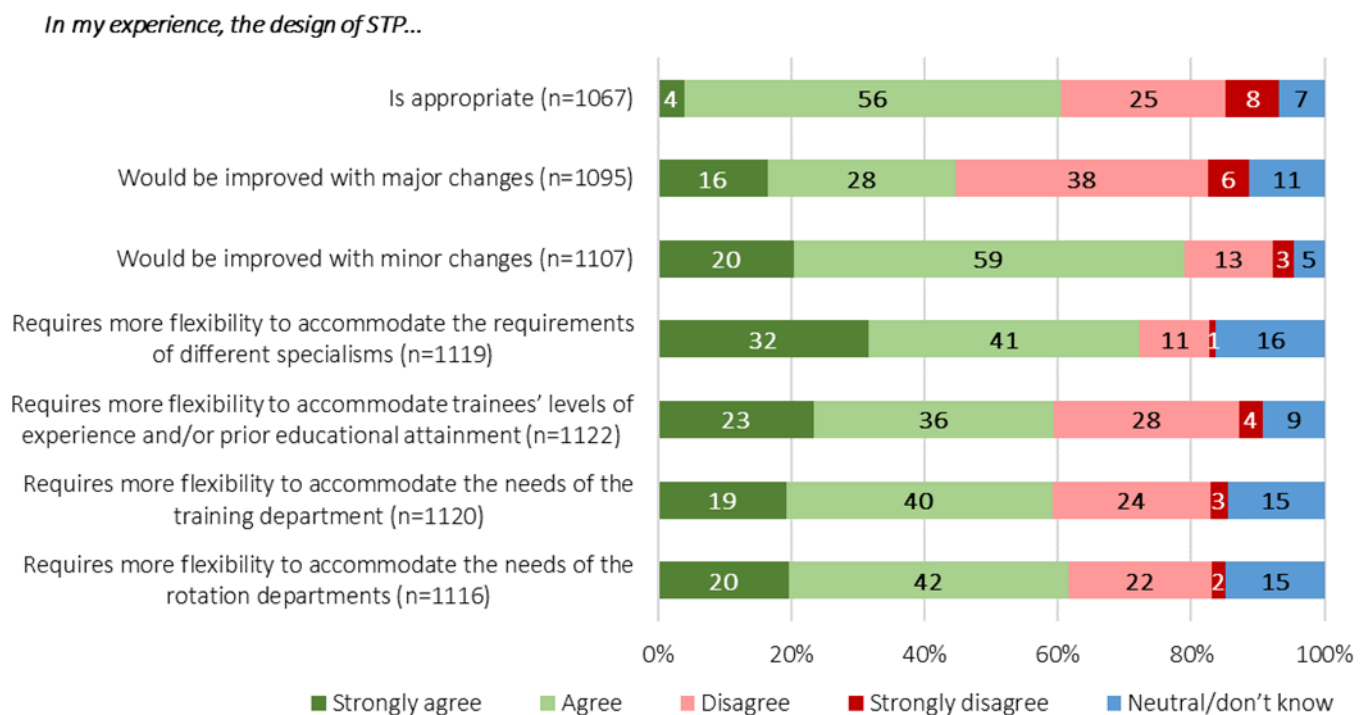
4.1 Overall design and structure of the STP

As shown in Figure 1, the survey respondents were more likely to agree that minor changes were needed to improve STP than major changes (79% favoured minor changes compared to 44% in support of major changes). Across the whole sample, 94% supported the view that some level of change is needed to the design of the STP.

Across all phases of the review, a consistently strong finding was that the STP would benefit from greater flexibility. Over 75% of survey respondents were of the view that the STP design requires more flexibility to accommodate the requirements of different specialties. Approximately 66% were in favour of greater flexibility to accommodate the needs of rotation departments, training departments and trainees’ levels of experience and/or prior attainment.

One of the key features of the STP is the provision of a large number of scientific specialties, with, mostly, small numbers of trainees in each specialty. The Phase 1 and 2 participants were asked for their opinions on the division of training by specialty but did not offer strong opinions or express support for alternative ways of organising the STP. However, in Phase 2, some respondents suggested (especially Medical Physicists) that the current division into discrete specialties does not reflect workplace reality.

Figure 1. Views on the current design of the STP (average item response rate 97.9%).

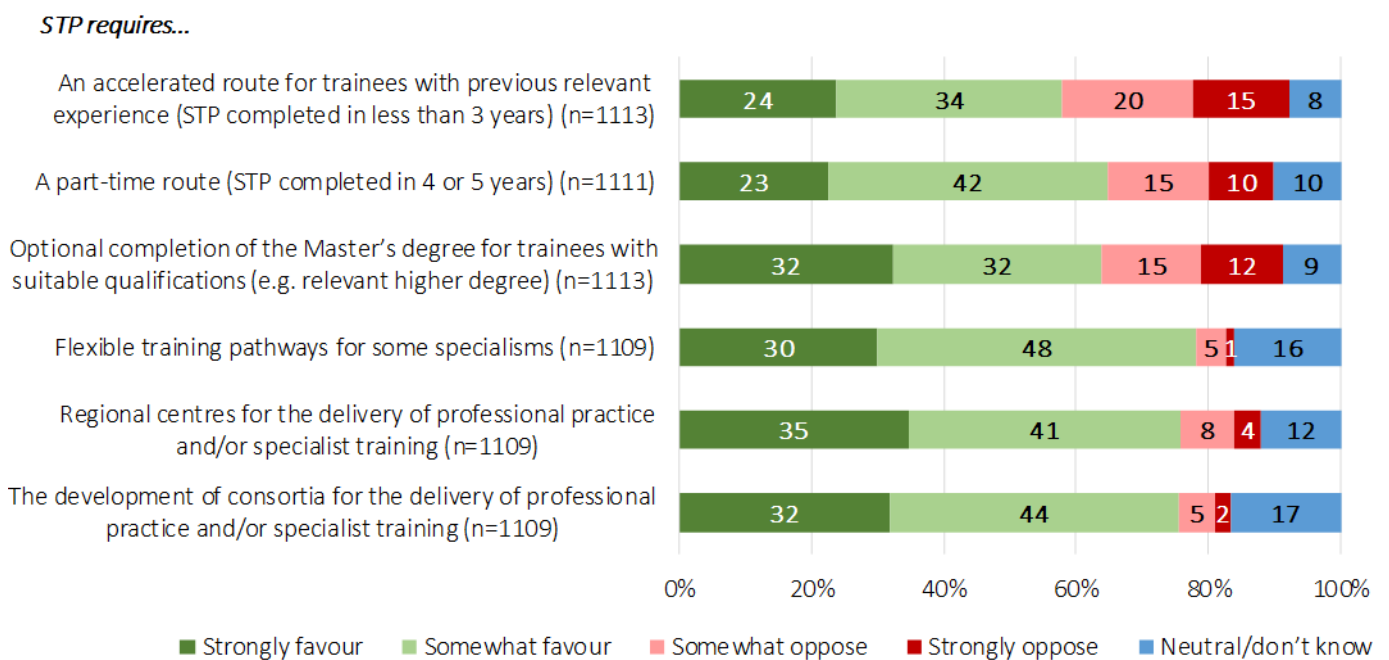


Stakeholders’ views were sought on a variety of alternative design models for the STP, such as an accelerated route for trainees with relevant prior experience, and flexible pathways for particular specialties. As shown in Figure 2, nearly 80% of survey respondents supported the notion of flexible pathways for some specialties (this rises to nearly 90% among Bioinformaticians; see Appendix, Figure 2). Regional centres and the development of

consortia for the delivery of professional practice and/or specialist training received the support of three-quarters of the survey respondents. It emerged during the focus groups that delivering the specialist years by training consortia is already a reality in some larger cities. This was seen as a good model for training delivery by many participants, although questions were raised about feasibility for other geographical locations such as rural settings.

Around two-thirds of the survey respondents expressed support for the development of a part-time route, an accelerated route, and optional completion of the master’s degree, where appropriate. In analysing the results by the respondents’ STP roles, trainees were most likely to support the optional completion of the master’s degree (see Appendix, Figure 15).

Figure 2. Views on alternative approaches to STP (average item response rate 98.0%).

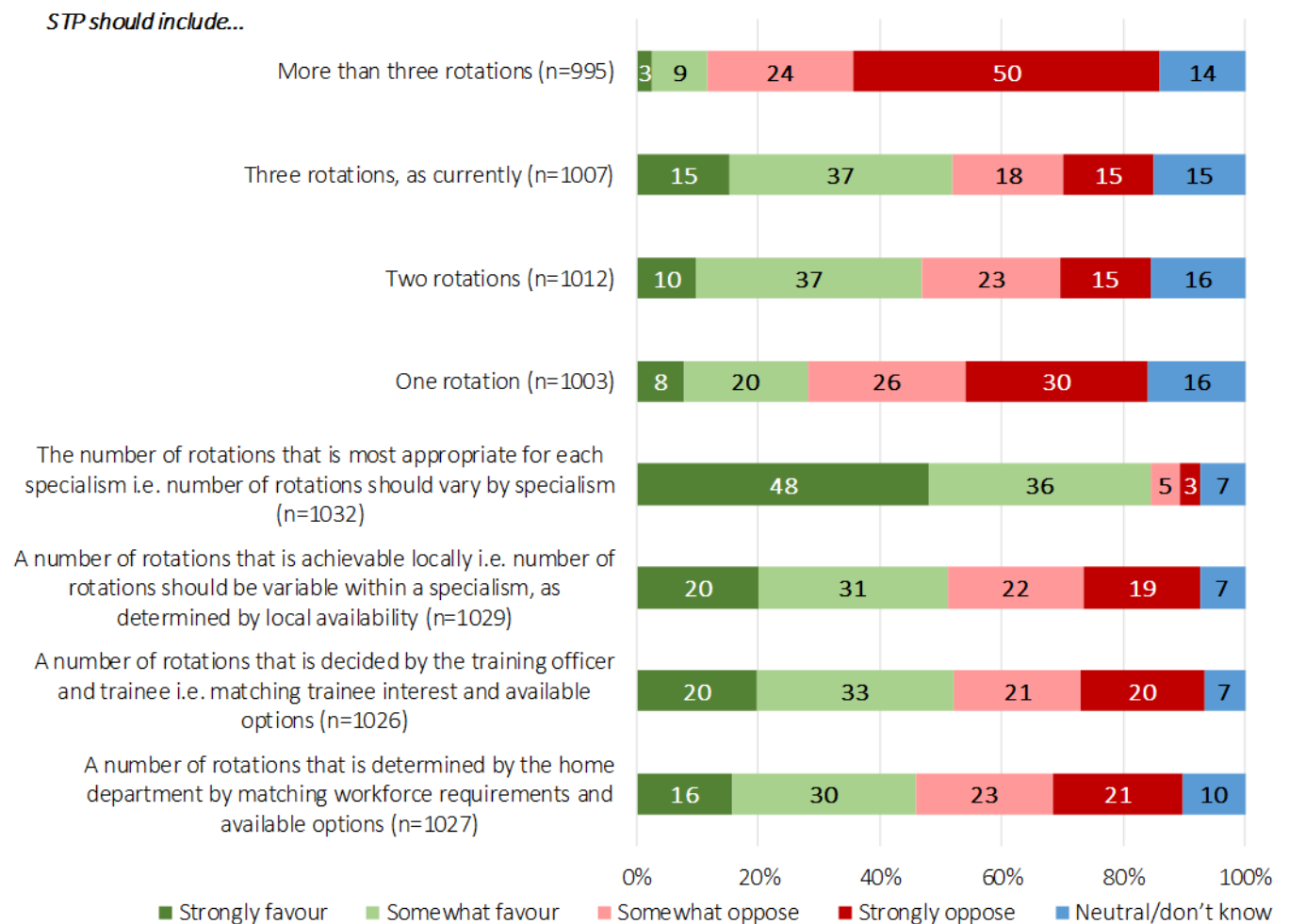


4.2 Rotations

Many participants considered rotations to be an important and valuable element of the STP but identified challenges regarding the way in which they work at present. There was significant support for keeping rotations as a core part of the STP, and for keeping rotations in Year 1 of the STP. However, three-quarters of survey respondents would like to see improvements to the design of rotations. The improvements mostly concerned flexibility and choice in terms of timing, number, length and organisation of rotations. While there was strong support for rotations to be completed early in the programme, over half of survey respondents would value complete flexibility where the needs and preferences of all parties involved would determine the timing of rotations.

In relation to time spent in the home and other departments, two-thirds of survey respondents would like rotations to be organised at the discretion of all involved i.e. as convenient for the trainee, training officer, rotation host, and home department. Participants at three of the six focus groups agreed it would be valuable for trainees to spend time in their home department, getting a sense of their own specialty before going on rotation. Participants in the two Physical Sciences focus groups did not agree, and were generally satisfied with the current organisation of rotations.

Figure 3. Views on the number of rotations (average item response rate 89.9%).



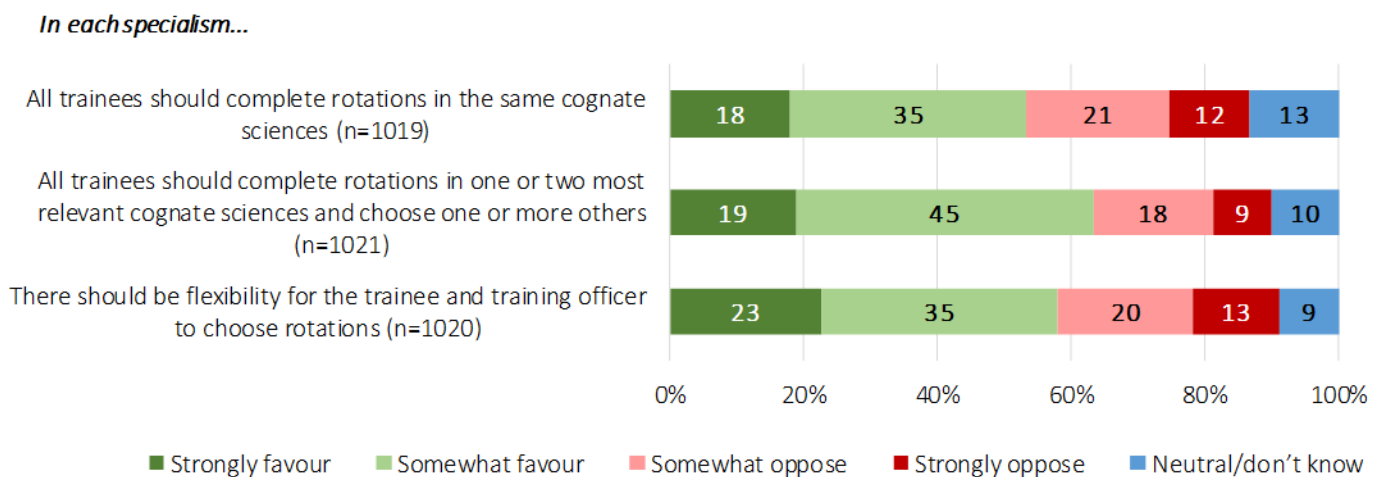
Two-fifths of survey respondents would prefer rotations to be of variable length, depending on what is meaningful to the trainee’s learning and/or what departments are willing to offer. In the focus groups, a number of participants expressed a preference for such flexibility to be combined with a minimum duration requirement to ensure, for example, that a one or two day visit to another department could not be counted as a rotation. Three of the six focus groups suggested that two weeks would be an appropriate minimum time in any one rotation.

Interestingly, during Phases 1 and 2, participants commented that adherence to the 12-week pattern of rotations was variable within and across specialties. Some participants shared

experiences, or awareness, of the use of much shorter rotations. Where rotations were shortened, explanations mostly centred on practical and logistical issues. Participants also noted that the quality of rotations could be highly variable, with some being well organised, meaningful and essential to trainees' progression, and others less well organised and useful.

Currently, the rotations for each specialty are pre-defined, with no choice for trainees or training officers in the rotations to be completed (with a small number of specialty-specific exceptions). The findings shown in Figure 4 suggest that the level of support for the current rotation arrangements was only marginally lower than the level of support for trainees and training officers being able to choose rotations (53% compared with 58%). Most respondents favoured a mixed model that combined some pre-defined rotations with some optional rotations (64% in favour).

Figure 4. Views on rotation choice (average item response rate 90.0%).



In terms of the content and internal organisation of rotations, the following suggestions were made:

- Rotations should be centred on experiential learning and demonstration of required learning rather than formal completion of a full set of mandatory learning outcomes and competencies;
- A flexible design for rotations would allow trainees to tailor their learning and ensure efficient use of rotation-related resources and competencies;
- Each rotation could comprise two modules; one core and one optional (offering additional learning), with the trainee and training officer determining the required depth of learning (core, or core plus optional).

4.3 Competencies

There was significant support for the continued use of competencies across the STP, with the majority of respondents (90% or more) agreeing or strongly agreeing that competencies are an essential part of the learning experience and assessing trainees' development.

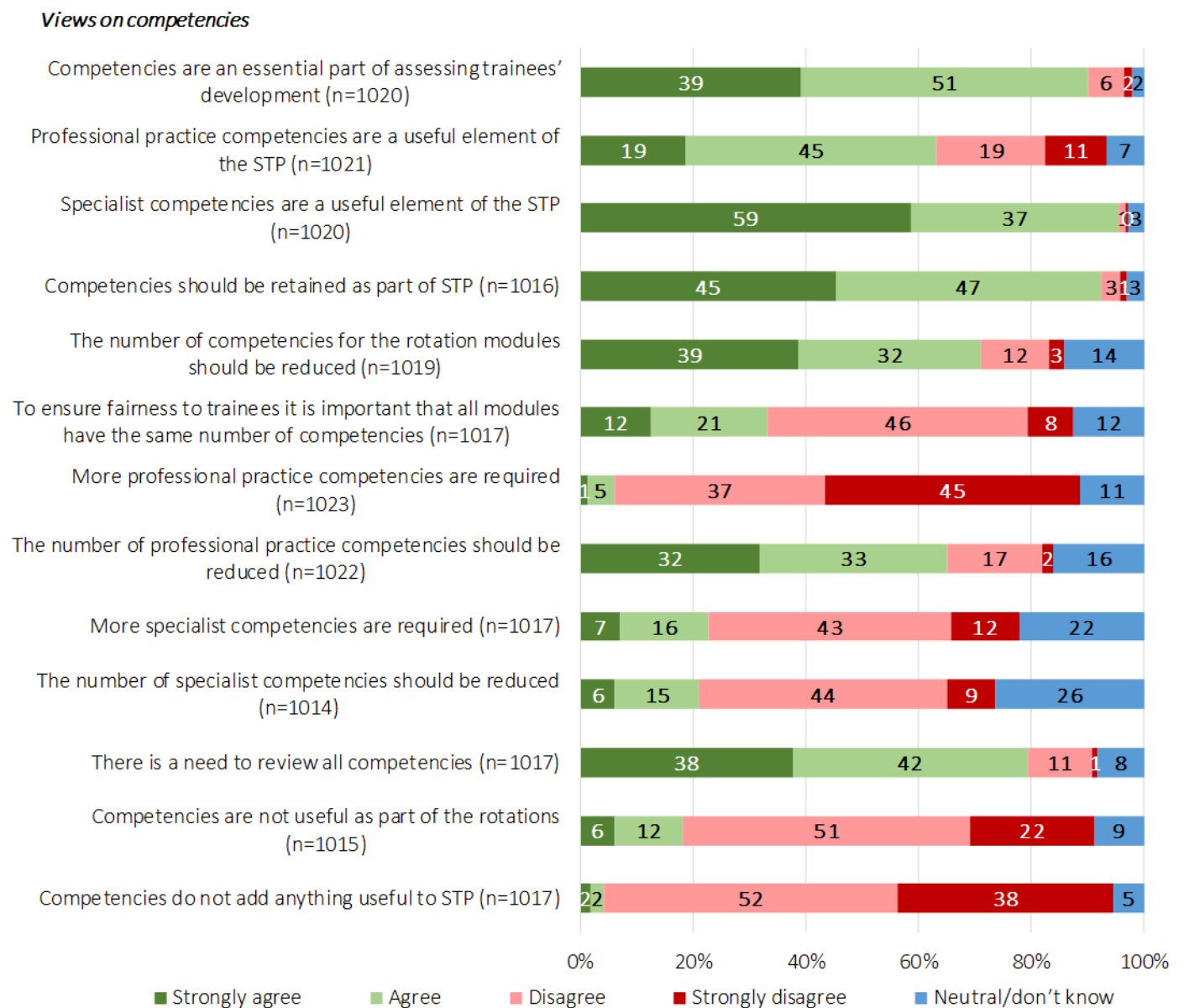
However, across all three phases of the review there was a high level of support noted for a review of specialist competencies. Participants noted that scientific practice had changed since the competencies were first developed and some competencies were out-dated, with some also being confusing.

The majority of survey respondents were satisfied with the current number of specialist competencies, and there was no real support for standardising the number of competencies across specialties as a means of ensuring fairness to trainees.

There was, however, strong support for standardisation, as much as is possible, in terms of the evidence requirements for competencies. Interview and focus group participants suggested that there is currently a great deal of variability in how much evidence is required to gain satisfactory sign off by training officers, which was viewed as unfair. Many respondents requested clear guidance and training for training officers on what evidence should be expected from trainees and how competencies could best be verified.

In addition to a review of specialist competencies, respondents showed support for reducing the number of professional practice competencies (a view expressed by trainees in particular) and rotation competencies.

Figure 5. Views on competencies (average item response rate 90.0%).



4.4 Specialist training

The majority of the interview and focus group participants thought that two years (or 18 months in reality) was sufficient time to cover the specialist content, although it was acknowledged that only minimum competence could be gained in that time.

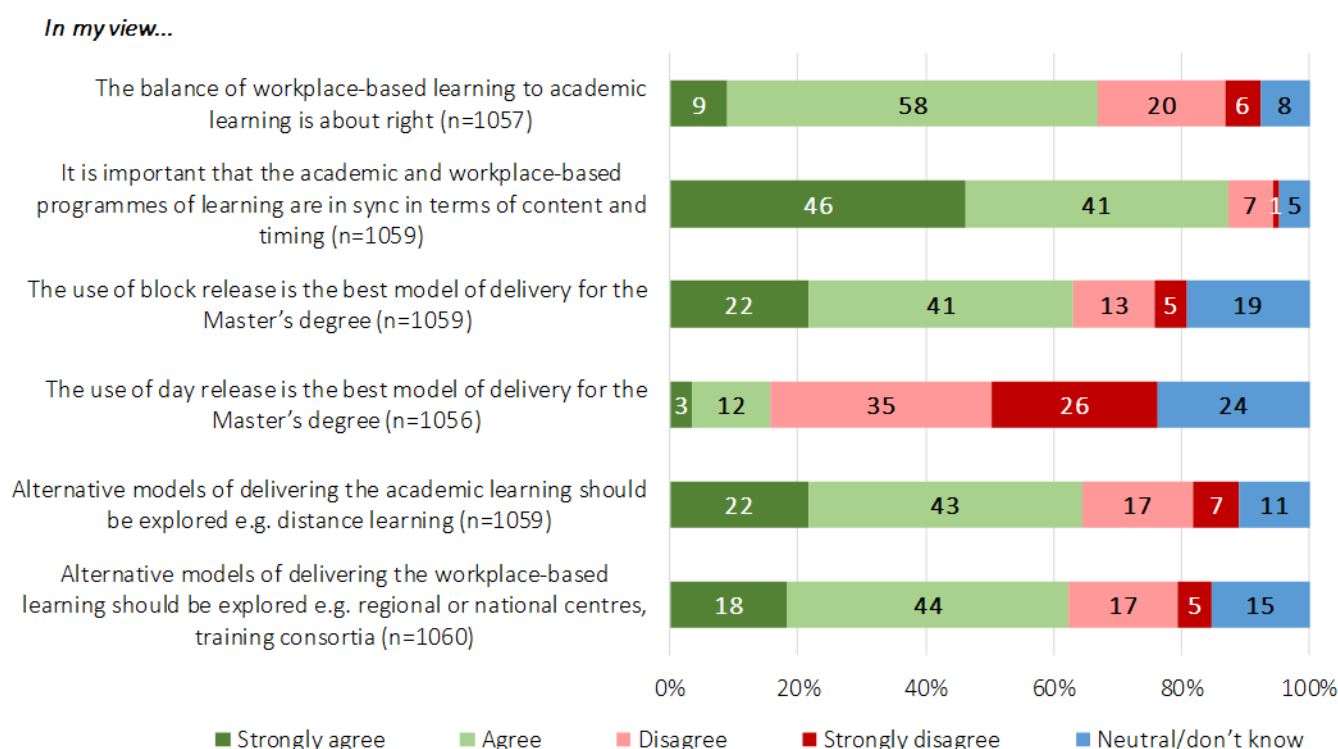
Several interviewees and focus group participants indicated that NHS employers/centres vary greatly in relation to both the quality of the specialist training offered and their respect for the supernumerary status of STP trainees.

As shown in Figure 6, keeping academic and workplace-based learning synchronous in terms of content and timing was seen as important by 87% of survey respondents. Findings from the focus group discussions suggested that when they were perceived not to be synchronous this was due to lack of communication and co-ordination between the academic and workplace-based learning providers. Some focus group participants

suggested that the NSHCS, perhaps in collaboration with Themed Boards, should explore how the communication and co-ordination could be enhanced.

Over two-thirds of survey respondents thought that the balance of workplace-based learning to academic learning was about right. In terms of the method of delivering the master’s degree, block release was considerably more popular than day release (63% compared with 15% in support of day release). Approximately two-thirds of survey respondents supported alternative models of delivering academic content (e.g. distance learning) and workplace-based learning (e.g. training consortia) (see Figure 6.)

Figure 6. Views on elements of specialist training (average item response rate 93.7%).



The views on the value of the elective module were mixed, with 50% perceiving the elective as an important element of the STP and 34% believing it is not an essential requirement. In analysing the results by STP role, trainees were most likely to favour electives, and training and workplace representatives were least likely to be in favour of them (see Appendix, Figure 18).

A range of views were expressed about the quality of the academic teaching and learning provisions across specialties. Many trainees were appreciative of the opportunity to undertake the master’s degree in their specialist area. However, some concerns were expressed about taught content that did not reflect current scientific practice, and less than satisfactory teaching and organisation on some of the master’s courses.

Among the HEI representatives, concerns were raised about the small numbers of STP students taking courses and the impact of this on programme viability and learner experience.

4.5 Assessment

The current approach to assessing trainees in the workplace was thought to work well by two-thirds of the survey respondents, as shown in Figure 7. Workplace-based assessments were perceived as helpful for guiding learning and identifying trainee’s strengths and learning needs, by 80% and 75% of the survey respondents, respectively. More than half of the survey respondents agreed that the number of assessments to be completed during the STP is about right.

Figure 7. Views on workplace-based assessment (average item response rate 89.0%).

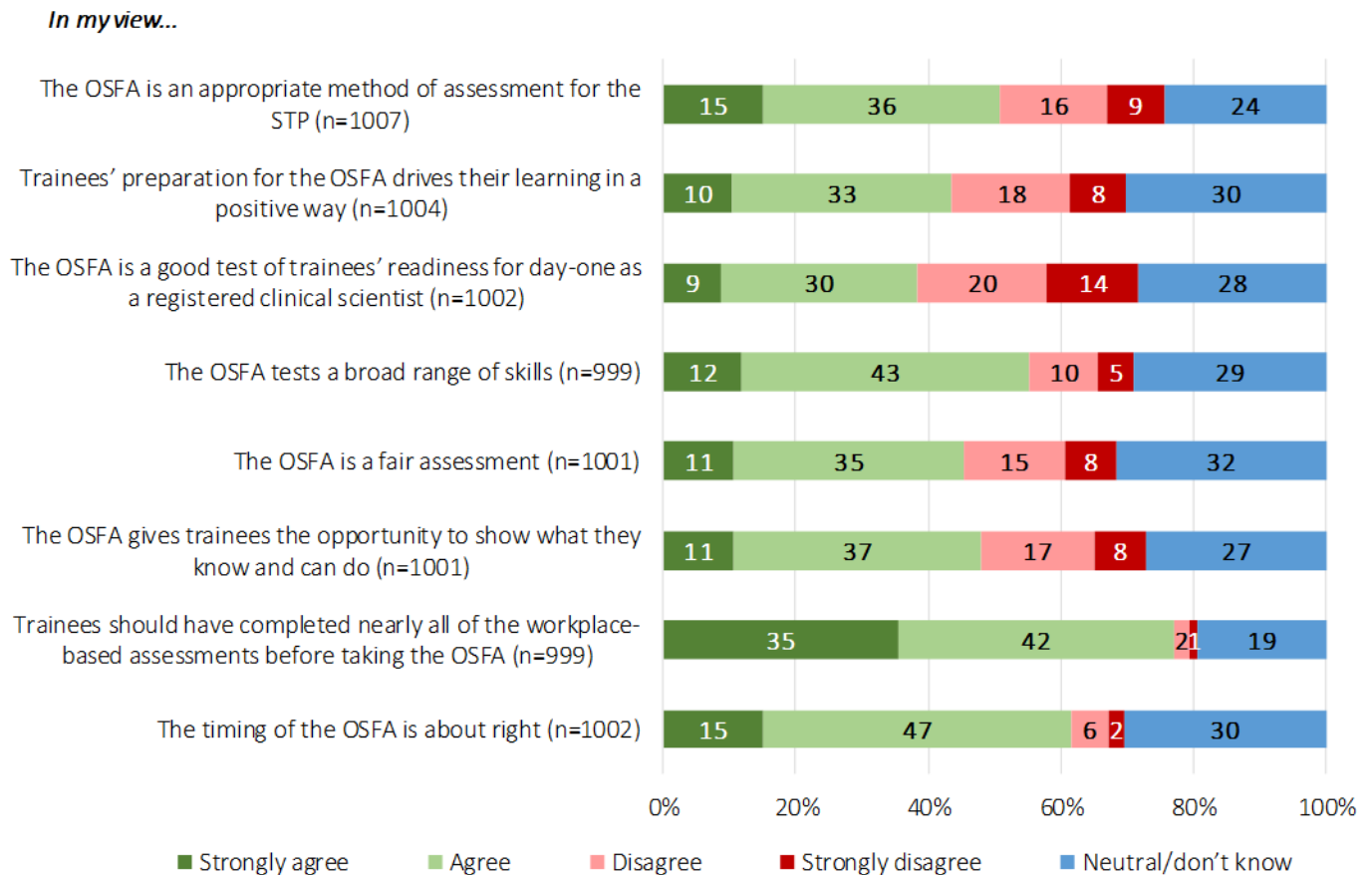


The survey items relating to the Objective Structured Final Assessment (OSFA) elicited a high proportion of ‘neutral/don’t know’ responses (ranging between 19-32%) suggesting that not all respondents were familiar with, or wished to express an opinion about, this assessment method (see Figure 8). Half of all survey respondents thought that the OSFA is an appropriate method of assessment for the STP. Just over half of survey respondents supported the view that the OSFA tests a broad range of skills and nearly two-thirds thought that the timing of OSFAs is about right. Just under half agreed with the statements that the OSFA is a fair assessment and that it gives trainees the opportunity to show what they know

and can do. Roughly equal proportions of survey respondents agreed and disagreed that the OSFA is a good test of trainees’ readiness for day-one as a registered clinical scientist.

There was strong support for the view that trainees should have completed all, or nearly all, of their workplace-based assessments before taking the OSFA (77%).

Figure 8. Views on the OSFA (average item response rate 88.5%).



Stakeholders from the Physical Sciences and Bioinformatics themes tended to be more critical of the utility of the OSFA than stakeholders in the other themes, both in the focus group discussions and survey responses. The focus group findings suggested that the concerns centred upon ‘shoe-horning’ scientific content into the OSFA method and framework. For Bioinformatics in particular, the time available in each station was not seen as conducive to the testing of important skills and knowledge domains in the Bioinformatics specialties. More generally, participants commented that OSFA tasks should be reviewed to ensure they are meaningful and in tune with the workplace practices of clinical scientists within each specialty.

4.6 Support for training officers

Several stakeholder respondents in both interviews and focus groups highlighted the need for better consistency of learner experience across the STP programme. They reported significant discrepancies between the experiences of STP trainees, who often encounter

each other as they move through the programme, visiting different workplaces and attending master’s degree sessions. A number of these individuals thought that there is a need to improve consistency of training standards.

Participants in several focus groups wanted to see more support for training officers including formal (e.g. accreditation) and informal (peer support) elements. Some also thought that as trainees move from one rotation to the next in the first year, more emphasis ought to be placed on monitoring the progress of trainees and supporting any trainees who were experiencing difficulties.

4.7 STP priorities

The survey respondents were asked to indicate the level of priority with which they believed the different elements of the STP should be reviewed and improved (see Figure 9).

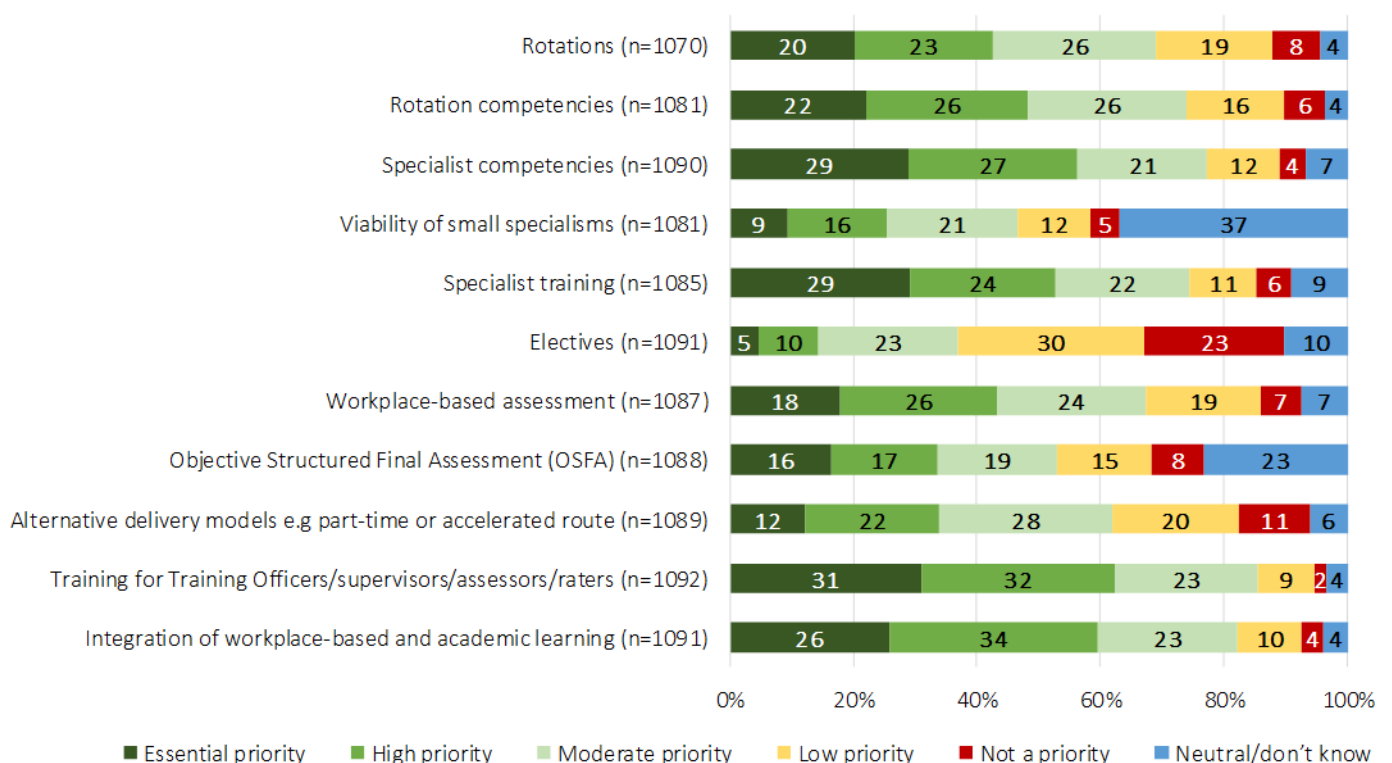
There were three elements of the STP that were identified by more than half of all survey respondents as being of essential or high priority. These are:

1. Training for training officers/supervisors/assessors/reviewers
2. Integration of workplace-based and academic learning
3. Specialist competencies

Although not ranked especially highly by the survey respondents, the interview and focus group respondents placed a high priority on rotations as requiring urgent review.

Figure 9. Priorities for STP review and improvement (average item response rate 95.7%).

Level of priority with which different elements of STP should be reviewed/improved...



Among trainees, the top ranked priority was training for training officers, supervisors, assessors and reviewers (71%), followed by the integration of workplace-based and academic learning (63%).

A review of electives gained the least support among the participants as requiring review or change, with over half of all respondents rating this as a low priority (53%) (see Appendix, Figure 16).

5. SUMMARY

This review has consulted approximately 1,100 STP stakeholders and produced a number of important findings that will help shape the future of the STP. Reassuringly, there is support among stakeholders for continuing with the original structure and design of the STP. Each individual element of the STP – for example, the specialist training in the workplace, rotations, competencies, the master's degree, and workplace-based assessment – is perceived as performing an essential educational function and contributing to the quality of the programme and the trainees' learning experiences. However, there is also clear and strong support for introducing flexibility to the structure to achieve better balance between the needs and interests of the trainee, training officer, training department, rotation department, the higher education provider and the scientific service within which the trainee is employed. To achieve this flexibility – and for general improvement purposes – there is a need to review each element and to reflect on the feedback stakeholders have provided as part of this review.

6. RECOMMENDATIONS

The next stage of the STP Improvement Review will involve engaging and consulting with STP stakeholders to explore options for change. As a starting point for the next stage, this review offers five priority recommendations:

1. For each specialty, there should be a review of the professional practice and specialist competencies by those delivering the training. This will ensure that the competencies are clear, relevant, reflective of current practice, and useful to learning;
2. There is a need to review and update the guidance on the design and delivery of the rotations. The amended guidance should allow training officers the flexibility to customise plans for rotations in a way that better fits the service needs, the training plans of individual trainees, and the availability of rotation opportunities in their locality;
3. There is a need to understand in more detail, and take action to improve, the synchronisation of the university-based learning with the work-based learning;
4. The NSHCS should enhance the training opportunities for training officers and those who are assessing trainees in the workplace;

5. The NSHCS should review and improve the mechanisms for ensuring the consistency of learner experience.

The following additional recommendations are noted as being of particular importance to some participants or specialties:

6. Review opportunities for delivery of academic content through distance learning, and specialist workplace learning through training consortia;
7. Review the current design of the OSFA to ensure appropriate fit to the assessed content.