

Clinical Radiography Education across Europe

A. England^{a,b*}, S. Geers-van Gemenen^c, A. Henner^{a,d}, T. Kukkesa^e, D. Pronk-Larive^a, L.
Rainford^{a,f}, J.P. McNulty^{a,f}

- a European Federation of Radiographer Societies, Catharijnesingel 73, 3511 GM Utrecht, The Netherlands
- b Directorate of Radiography, School of Health Sciences, University of Salford, Allerton Building, Salford M5 4WT, United Kingdom
- c Nederlandse Vereniging Medische Beeldvorming en Radiotherapie, Catharijnesingel 73, 3511 GM Utrecht, The Netherlands
- d School of Health and Social Care, Oulu University of Applied Sciences, Kiviharjuntie 8, FI-90220 Oulu, Finland
- e Tartu Health Care College, Nooruse 5, 50411, Tartu, Estonia
- f Radiography and Diagnostic Imaging, School of Medicine, University College Dublin, Health Sciences Centre, Belfield, Dublin 4, Ireland

* Andrew England (corresponding author)

Email: A.England@salford.ac.uk

Telephone: +44 161 2950703

Abstract

Purpose: To establish a picture of clinical education models within radiography programmes across Europe by surveying higher education institutions registered as affiliate members of the European Federation of Radiography Societies (EFRS).

Method: An online survey was developed to ascertain data on: practical training, supervisory arrangements, placement logistics, quality assurance processes, and the assessment of clinical competencies. Responses were identifiable in terms of educational institution and country. All educational institutions who were affiliate members at the time of the study were invited to participate (n=46). Descriptive and thematic analyses are reported.

Results: A response rate of 82.6% (n=38) was achieved from educational institutions representing 21 countries. Over half of responding institutions (n=21) allocated in excess of 60 European Credit Transfer and Accumulation System (ECTS) credits to practical training. In nearly three-quarters of clinical placements there was a dedicated clinical practice supervisor in place; two-thirds of these were employed directly by the hospital. Clinical practice supervisors were typically state registered radiographers, who had a number of years of clinical experience and had received specific training for the role. Typical responsibilities included monitoring student progress, providing feedback and completing paperwork, this did however vary between respondents. In almost all institutions there were support systems in place for clinical placement supervisors within their roles.

Conclusions: Similarities exist in the provision of clinical radiography education across Europe. Clinical placements are a core component of radiography education and are supported by experienced clinical practice supervisors. Mechanisms are in place for the selection, training and support of clinical practice supervisors. Professional societies should work collaboratively to establish guidelines for effective clinical placements.

***Highlights (for review)**

Highlights

- First European survey of clinical radiography education.
- Practical component of radiography programmes deeply embedded.
- Clinical practice supervision fundamental.
- Variations between institutions exist.

Introduction

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2 Radiographic practice is over one hundred years old and from the outset the role of the
3 radiographer has constantly changed and continues to evolve in parallel with advances in
4 technology. Maintaining workforce capacity, whilst reacting to the latest clinical demands
5 on radiographer training, is a key responsibility of radiography educators. Within Europe
6 this is typically provided by universities, technical institutes and vocational colleges. A
7 report by the European Federation of Radiographic Societies (EFRS) evaluated the landscape
8 of radiography education across Europe.¹ Founded in 2008, the EFRS currently represents
9 over 100,000 radiographers and 8,000 student radiographers across Europe through 37
10 national societies and 57 educational institutions. The Educational Wing of the EFRS,
11 established in 2010, is comprised of all of the educational institutions that are affiliate
12 members of the EFRS and its aim is to promote and develop all levels of radiography
13 education and research across Europe. The EFRS report¹ focused on a broad spectrum of
14 issues including the underpinning curricula, duration of study, credit load, accreditation
15 requirements, staff qualifications, exchange opportunities and the availability of
16 postgraduate programmes. One of the key outcomes from the report was that significant
17 diversity exists between institutions, especially when spread across international borders.
18 Despite the alignment efforts of the Higher Education Network of Radiographers in Europe
19 (HENRE), a thematic network co-financed by the European Commission through the 'Tuning
20 Educational Structures in Europe' project,²⁻⁴ the EFRS Education report¹ highlighted
21 significant differences between radiography programmes across Europe. The university
22 driven 'Tuning' projects aim was to offer a definitive approach to facilitate the
23 implementation of Bologna (European process to ensure comparability in the standards and
24 quality of higher-education qualifications), whilst also preserving autonomy and freedom of
25 educational institutions.⁴⁻⁶ Likewise the purpose of the European Qualifications Framework
26 (EQF) is to aid Member States, educational institutions, employers and individuals in the
27 comparison of qualifications across the European Union's diverse education and
28 training systems.^{5,7-9} This led the EFRS to publish their EQF Level 6 Benchmarking
29 Document: Radiographers.⁸

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58 The process of educating a radiographer is multifaceted and typically incorporates a split
59 between academic studies within a university or college and a practical component usually
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1 within a hospital or health centre.¹⁰ Given the results of the EFRS survey¹ and the
2 widespread differences in healthcare provision between EU Member States¹¹ it is likely that
3 there may be distinct differences in the provision of clinical radiography education. This has
4 recently been brought to light with the publication of a report detailing the inclusion of
5 patient safety within radiography curricula across Europe.¹² It is, therefore, a core aim of
6 the EFRS organisation to report the current status of clinical radiography education across
7 Europe.
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15 **Methods**

16 Design

17 The research design was an online survey using a questionnaire developed by the EFRS
18 Educational Wing focusing on key issues relating to clinical radiography education. The
19 questionnaire comprised of open and closed questions and consisted of sections designed
20 to ascertain data on: amount and types of practical training within a programme (two
21 questions), supervisory arrangements (ten questions), placement logistics (two questions),
22 quality assurance processes (one question) and the assessment of clinical competencies
23 (two questions). All respondents consented to data being identifiable in terms of
24 educational institution and country. The Dutch Society of Radiographers was enlisted to
25 help develop and deploy the online survey in conjunction with the Dutch research agency
26 MWM² (MWM², Amsterdam, ML), backtracking was not permitted between sections of the
27 survey.
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43 Participants

44 All 46 educational institutions, that were EFRS affiliate members (educational institutions) at
45 the time of the study, were invited to complete the survey between November 2014 and
46 January 2015. An initial response deadline of two weeks was stated and two follow-up
47 emails were sent to non-responding institutions.
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54 Data analysis

55 All data were uploaded to SPSS Version 20 (IBM, Armonk, NY). Descriptive statistics are
56 reported for most analyses while open questions were examined using thematic analysis.
57 For the purposes of assessing the contribution of practical training to a programme the
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1 European Credit Transfer and Accumulation System (ECTS) was used. By way of an example
2 a single year of full-time study typically generates 60 ECTS (in the United Kingdom credit
3 system this would equate to 120 credits).
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7 **Results**

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9 Responses were received from 38 of the 46 educational institutions giving a response rate of
10 82.6% representing 21 countries. The educational institutions that participated in this
11 survey are listed in **Table 1** together with a three digit identifier. The three-digit identifier
12 facilitates the identification of individual institutional responses for each question and has
13 been used in similar publications.^{1, 12}
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21 Time available for practical training

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23 Respondents were asked to state the total amount of practical training for the students in
24 both skills labs (educational institution based X-ray training facility or similar) and in the
25 clinical practice setting during the whole period of education and training. Responses were
26 received from all 38 respondents for this question (**Figure 1**). The majority of institutions
27 (n=21; AT2, CH1, DK1, EE1, FI1, FI2, FI3, FI4, GB1, GR1, IE1, IT1, MT1, NL1, NL2, NO1, NO2,
28 NO3, NO4, PT1, PT2) offered in excess of 60 ECTS of practical training for students during
29 their programmes. This was followed by 11 institutions (AT1, BE1, CZ1, FR1, GB2, GB3, HU1,
30 NL3, PT3, SE2, SE3) that incorporated between 51-60 ECTS of practical training for students
31 in the skills lab and in clinical practice during their programmes. For the 21 institutions with
32 in excess of 60 ECTS, the mean ECTS for practical training in their programmes was 76.9 (SD
33 = 11.3; range: 62 to 96 ECTS)(**Figure 1**).
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46 Time allocated for training in skills labs

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48 Respondents were asked to quantify the total amount of practical training that the students
49 perform in the skills lab during the whole period of training (**Figure 2**). 55% (n=21) of
50 programmes provided 15 ECTS or less of practical training within the skills labs (AT1, AT2,
51 BE1, CZ1, DK1, FI2, FI4, FR1, GB1, GB2, GB3, IE1, IT1, LV1, MT1, NO2, NO3, NO4, SE1, SE2,
52 SL1). Programmes offering greater than 26 ECTS of practical training in the clinical skills lab
53 were in Belgium, the Netherlands and Portugal (BE2, NL1, NL3, PT1, PT2, PT3).
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4 Clinical supervision of students

5 Respondents were asked to identify the percentage of the total amount of ECTS clinical
6 training that students perform under supervision. The percentage of the total amount
7 varied from 10 to 20% of the time (n=3; AT2, BE2, LV1) to in excess of 50% of the time
8 (n=10; CH1, DK1, FI1, FI2, GB1, IT1, MT1, NL2, NO1, NO3). For the 10 institutions with an
9 excess of 50% of the student clinical training performed under supervision, the mean
10 percentage was 84.6% (SD = 18.7%; range: 55 to 100%).
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19 The majority, 79% (n=30), of institutions indicated that between 1 and 3 students were
20 supervised by an individual clinical staff member during clinical placement. 8% (n=3; HU1,
21 LU1, PT1) indicated that supervision was for 4 to 6 students and 13% (n=5; DK1, GR1, IT2,
22 NL1, NO1) indicated that between 7 to 10 students were supervised in this way.
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29 The majority, 71% (n=27) indicated that there was a dedicated clinical practice supervisor
30 available at all of their clinical placement sites. Six institutions (FI4, GR1, HU1, IT1, IT2, NO2)
31 responded stating that they had a dedicated clinical placement supervisor in more than 75%
32 of the clinical placement sites. Two institutions (BE2, SE2) had clinical practice supervisors
33 in between 50 and 75% of placement sites and a further two (AT2, BE1) had supervisors in
34 less than 50% of clinical sites. Only one institution (MT1) indicated that they had 'No'
35 dedicated clinical practice supervisor at any of their clinical sites.
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45 When asked about the clinical practice supervisors, 68% (n=26) institutions indicated that
46 the dedicated clinical practice supervisors were paid by the hospital and 16% (n=6; BE1,
47 CH1, EE1, GR1, LU1, PT3) indicated that the posts were paid by the educational institution.
48 Those who responded 'Other' (16%, n=6; CZ1, FI2, FI4, HU1, MT1, SE2) indicated that their
49 clinical practice supervisors were a mix of those paid for by the hospital and those paid for
50 by the educational institution (n=3; CZ1, HU1, SE2), that the clinical practice supervisors
51 were radiographers working in the clinical department rather than dedicated clinical
52 supervisors (n=2; FI2, FI4), or a combination of clinical practice supervisors paid for by the
53 educational institution and academic staff members (n=1; MT1).
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2 Respondents were invited to indicate the responsibilities of their respective clinical practice
3 supervisors. **Table 2** highlights the range and frequency of responsibilities of the clinical
4 practice supervisors. Respondents were also asked to provide details on the requirements
5 for selection as a clinical practice supervisor. 68.4% (n=26; AT1, AT2, BE1, CH1, CZ1, EE1, F1,
6 FI2, FI3, FI4, FR1, GB1, GB3, GR1, HU1, IE1, IT1, IT2, LV1, NO1, NO2, NO3, NO4, PT1, SE1,
7 SL1) of institutions indicated that State registration as a radiographer was a requirement to
8 work as a clinical practice supervisor. 57.9% (n=22; AT2, BE1, CH1, DK1, EE1, GB1, GB2, GB3,
9 GR1, HU1, IT1, IT2, IE1, NL1, NL2, NL3, PT1, PT3, SE1, SE2, SE3, SL1) indicated that at least
10 two years' experience as a qualified radiographer was a requirement, and 44.7% (n=17; AT2,
11 CH1, CZ1, DK1, EE1, FI1, FI3, GB1, GB3, IE1, IT1, LU1, NL1, NL2, SE1, SE3) indicated that
12 training on supervision was a requirement. Those who responded 'Other' (26.3%, n=10)
13 indicated that requirements included: must be a registered radiographer with at least two
14 years' experience and training in supervision (n=1; MT1), three years clinical experience
15 (n=2; GB1, PT2), the highest basic education grade as possible (n=2; IT1, IT2), have some
16 teaching training (n=1; CH1), must be established in a clinical department and be able to
17 discriminate good from bad practice (n=1; GB1), must work in a large hospital (n=1; GR1), be
18 committed to CPD (n=1; IT2), have the right to train and supervise (n=2; EE1, LV1), or must
19 be nominated by the clinical department (n=1; BE2).

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39 Respondents were asked whether training for clinical practice supervisors was compulsory,
40 44.7% (n=17; AT2, CH1, GB1, FI1, FI2, FI3, FI4, IE1, IT2, LU1, NO2, NL1, NL2, NL3, SE1, SE2)
41 stated 'Yes' that training was compulsory for all clinical practice supervisors (**Figure 3**). For
42 those who have training 68.4% (n=26) respondents indicated that teaching staff from the
43 educational institution provided the training, 10.5% (n=4; AT1, FI3, NO2, SE2) indicated that
44 the training was provided by clinical staff, while 21.1% (n=8; AT2, HU1, LV1, NL2, PT1, PT2,
45 SE1, SE3) indicated 'Other'. Those who responded 'Other' indicated that no such training is
46 available (n=3; HU1, LV1, PT2), academic courses are provided (n=3; AT2, SE1, SE3), and
47 trainees can attend any external clinical practice supervision course (n=1; NL2).

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58 The majority of institutions, 58% (n=22; AT1, BE1, BE2, CZ1, FI1, FI2, FI4, GB3, GR1, HU1, IT1,
59 LV1, MT1, NO1, NO4, NL3, PT1, PT2, PT3, SL1), indicated that less than 10 hours of
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1 compulsory clinical practice supervision training was required. This was followed by 21%
2 (n=8; AT2, CH1, DK1, EE1, GB2, NO3, SE1, SE3) who indicated that over 50 hours of training
3 was required. For the eight institutions with in excess of 50 hours of training required for
4 clinical practice supervisors the mean was 152 hours (SD = 72.9; range: 60 to 240 hours).
5 Full details of the quantity of compulsory supervisory hours are illustrated in **Figure 3**.
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11 As can be seen in **Figure 4** a range of topics are commonly included in clinical supervisory
12 training programmes.
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17 Institutions were asked whether there are formal agreements with all participating clinical
18 placement sites. The majority of institutions, 90% (n=34), indicated 'Yes' there was a formal
19 agreement in place with all participating clinical sites, those without included GB2, GR1,
20 MT1, NL2, SE3. Half of the institutions (n=19; CH1, CZ1, DK1, EE1, FI1, FI2, FI3, FI4, GB1,
21 HUI1, IT1, IT2, LV1, NO4, PT3, SE1, SE2, SE3, SL1) indicated that there was a financial
22 payment made to the clinical sites.
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31 Quality assurance of clinical educational experience

32 Thirty-two percent (n=12; BE1, DK1, GB1, IE1, IT2, MT1, NL1, NL2, NL3, NO2, NO3, SE3)
33 institutions indicated that regular audits of the clinical placement sites were performed.
34 When asked to specify the frequency of these audits, seven institutions responded as shown
35 in **Figure 5**. Most institutions used student questionnaires about the clinical placements
36 (86.8%; n=33) or student questionnaires about the supervision by clinical staff (68.4%;
37 n=26).
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46 The most commonly available support for the clinical practice supervisors in descending
47 order of frequency were: 'meetings at the educational institution' (81.6%), '*regular visits by*
48 '*academic staff*' (76.3%), '*training courses*' (36.8%) and '*web-based support*' (42.1%) (**Figure**
49 **6**). Those who responded 'Other' indicated: '*regular contact with academic staff*',
50 '*telephone contact, peer support network across sites*', '*occasional consultations*', and '*topic*
51 '*discussions*'.
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1 The most commonly used methods for the assessment of clinical placement competences in
2 descending order of frequency were: '*observation of professional practice*' (76.3%), '*written*
3 '*report*' (73.7%), '*portfolio*' (57.9%), '*reflective records*' (55.3%), '*case study*' (50%), '*oral*
4 '*presentation*' (47.4%), '*oral examination*' (44.7%), '*recording and reporting*' (39.5%) and
5 '*OSCEs*' (39.5%). Respondents were asked to identify the individuals involved in the clinical
6 assessment process be this formative assessment or summative assessment. The results are
7 illustrated in **Figure 7**.

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15 Respondents were finally asked whether they had reviewed the competences of their
16 graduates to the EFRS European Qualifications Framework Level 6 Benchmarking document
17 for Radiographers.⁸ Seventy-nine percent (n=30) of respondents indicated 'Yes' they had
18 reviewed the graduate competencies as outlined in the EFRS EQF benchmark document for
19 level 6.
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26 **Discussion**

27 As with previous reports there are identifiable differences in the provision of radiography
28 education across Europe.^{1,12} Unsurprisingly, this survey has also revealed a number of
29 differences in the delivery of the clinical side of radiography education. It is important to
30 note that this survey included submissions from 38 institutions across 21 countries. From
31 the data presented it is also clear that there are a number of commonalities between
32 education providers. This discussion will focus around the similarities, differences and also
33 provide future recommendations as to how clinical radiography education may evolve.
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44 The amount of programme time allocated for practical training was similar between the
45 participating institutions with the majority (n=35) allocating more than 40 ECTS (**Figure 1**).
46 This is likely to reflect the vocational nature of radiography and the need to provide
47 competent practitioners upon qualification. It was perhaps surprising that a single
48 institution indicated that they allocated only 10 to 20 ECTS for practical training. There
49 could be several reasons for this; 1) post-qualification requirements for this
50 institution/country are markedly different to the other institutions participating in this
51 survey; 2) a significant proportion of practical training is completed following qualification,
52 possibly as part of a preceptorship/internship process or pre-registration period. Interest is
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growing in this area, Nisbet (2008) reported on a model for preceptorship for newly qualified radiotherapy radiographers.¹³ In this work, it was identified that changes in educational strategies may have impacted on clinical competence and that it was essential to evaluate the potential effectiveness of a preceptorship programme.

The use of skills labs to teach the practical components of radiography was a key feature of many programmes. Despite this, the proportion of time in the skills labs as a direct component of the overall radiography programme was less than 16 ECTS for the majority of respondents (n=21). This is likely to reflect the availability and facilities within skills labs and also the time commitment needed to provide equitable access for all students. It is widely accepted that skills labs provide a safe opportunity in which to learn, however, this cannot be a substitute for direct clinical experience with patients. Cosson and Willis (2012) identified the need for educational institutions of providing a means for providing high-fidelity simulations of the clinical environment.¹⁴ More recently, we have seen extension of physical skill labs into virtual environments for providing radiography and radiotherapy education.¹⁵

The supervision of students is an essential part of training and is fundamental for patient safety. Responses from the survey indicate that clinical practice supervision is well established across the majority of educational providers and countries. Variation was also identified in terms of supervisor / student ratios. This may be explained by possible differences in the roles of supervisors between institutions and countries. In some countries clinical practice supervisors are responsible for teaching, assessment and placement rotas.¹⁶ In other situations a clinical practice supervisor will provide direct supervision of the student alongside performing day-to-day clinical radiographic examinations. Such variations may result from differences in the function of the clinical training site and its location relative to the educational provider. For several of the respondents the educational provider was based on the same site as the clinical placements; thus it is possible that their role could be different when compared to a hospital which is more remote.

1 For the majority of respondents (n=26) clinical practice supervisors were employed by the
2 clinical placement i.e. hospital and not the university or educational provider. There were,
3 however, a number of educational providers which directly employed the clinical practice
4 supervisors (n=6) to work alongside students when on clinical placement. For the remaining
5 educational providers the employer was a partnership between clinical and academia. Such
6 differences are likely to reflect differences in healthcare funding structures which exist
7 across Europe and the final destination of students upon qualification.
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15 The requirements for undertaking clinical practice supervision varied between responding
16 institutions. From the results of this survey a number of similarities were identified. Most
17 respondents indicated that clinical practice supervisors must be professionally registered,
18 have a number of years of post-qualification experience i.e. at least two years, and have
19 received training in clinical practice supervision. It was clear that all responding institutions
20 placed value on the clinical practice supervision role and that this was an integral part of
21 radiography training.
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31 Common requirements for clinical practice supervisors were: to teach students (50%),
32 monitor the progress of students (87%), provide feedback to students (95%) and education
33 providers (84%), and to complete placement related paperwork (68%). Several of the less
34 common roles included working with educational providers to develop curricula. From the
35 responses as a whole it appears that the role of the clinical practice supervisor is in the
36 organisation of radiography education within the clinical environment and monitoring the
37 assessment of clinical competencies.
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47 The majority of respondents indicated that clinical practice supervisors are commonly
48 required to undertake a small number of compulsory training hours. By way of example, for
49 25 respondents less than 21 hours of compulsory training were required. Respondents
50 agreed that the main component of relevant courses included training on roles and
51 responsibilities, monitoring student progress¹⁷, and assessment. Rose and Best¹⁷ discussed
52 the training requirements of clinical practice supervisors across a number of international
53 health sciences programmes, they reported similar themes in that high standards are
54 required from those who provide clinical healthcare education and this in turn requires
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1 support and infrastructure. Further guidance could be provided on the specific topics
2 including in training courses and also time commitments necessary.
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5 Over 90% of respondents indicated that there was a formal agreement between educational
6 providers and clinical placement sites. Half of the respondents indicated that there was a
7 financial arrangement between the educational provider and the clinical placement site.
8 This is likely to reflect higher education funding differences across jurisdictions which
9 influence the funding models for clinical training. In many instances the provision of clinical
10 placements for students is reciprocal in order to help produce a steady supply of qualified
11 radiographers in order to meet service demands. In many countries not all sites providing
12 diagnostic radiography, nuclear medicine and radiotherapy will support the training of
13 students. This is often a major challenge for educational providers and with the growing
14 demand to train radiographers more innovative methods are required to extending the
15 provision of student placements. As an example, Wareing and Henderson, in 2015,
16 reported on the perceptions' of final year diagnostic radiography students when on an
17 industrial radiography placement.¹⁸
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32 Participants were invited to indicate what mechanisms were in place for the quality
33 assurance of clinical placements. Approximately a third of institutions carry out regular
34 audits and the main method of receiving feedback on clinical placements is via student
35 questionnaires on placement sites (87%) or on the supervision by staff members (68%).
36 Price et al.¹⁹ stated, in a UK based study, that the audit of clinical placements can be an
37 effective tool in radiography education. The quality assurance of clinical placements may
38 also be a requirement of relevant professional bodies and as part of the programme
39 accreditation. This latter point was not evaluated in the questionnaire and could be a
40 subject for future surveys.
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51 The most common support mechanisms available for clinical practice supervisors were
52 'meetings at the educational institution' (81.6%) and 'regular visits by academic staff'
53 (76.3%). A wide spectrum of training opportunities for clinical practice supervisors is
54 desirable in order to reflect changing needs of the student. In many instances clinical
55 practice supervisors will provide pastoral support to students and implement support plans
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2 for those identified as having special education needs such as dyslexia, other disabilities,
3 and indeed personal or social difficulties.
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6 Radiography education is constantly evolving with non-traditional courses being developed
7 and accredited and existing courses undergoing regular review and change. This study
8 provides a valuable picture of clinical education across Europe but only presents data from a
9 single snapshot in time. Further limitations are that our study did not seek to capture the
10 differences between clinical placement sites in terms of capacity, case mix and the rotation
11 of students. It is likely that large differences could exist in the number of students at a
12 placement, rotational practices used by education providers, differences in the availability
13 of imaging equipment and the case mix for a site i.e. dedicated trauma centre versus
14 dedicated cancer centre, or small private imaging centre versus large academic medical
15 centre.
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27 The issue of validation could be raised when considering our results. Data collection relied
28 on a single person completing an online questionnaire for each affiliate member
29 (educational institution). The correctness of individual responses would have some
30 dependency on the respondents understanding of the English language and their knowledge
31 of their own institution's practices. We accept that there are mechanisms which could have
32 been used to test the validity of the collected data. Our decision not to undertake these
33 additional activities was largely based on the time available to complete this study. We
34 would argue that by engaging with the EFRS, and representing their institution, the
35 respondents have indicated that they were conversant with the English language and that
36 they were in a suitable position to have good understanding of their respective curricula.
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48 A comparison of study findings against those published in the literature was difficult. Within
49 radiography education, there is generally a lack of publications regarding clinical training. It
50 is, therefore, important that methods are developed and research is encouraged to further
51 develop the evidence based in this area.
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58 **Conclusions and recommendations**

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1 A large number of similarities exist in the provision of clinical radiography education across
2 Europe. Clinical placements are core components of radiography programmes and the
3 support from clinical practice supervisors is paramount. Mechanisms are largely in place for
4 the selection, training and support of clinical placement supervisors and in many instances
5 these are fundamental to the success of clinical education. Diversity exists across Europe
6 and multi-national organisations such as the EFRS should consider methods to further
7 harmonise the provision of clinical education. New radiography educators are being
8 introduced in order to respond to the growing demand for radiographers and these
9 institutions will require support when planning and delivering new programmes. To raise
10 and maintain standards of clinical education, national and international organisations, such
11 as the EFRS, have a role to play in formulating guidance on effective clinical placements
12 including training on clinical supervision and quality assurance processes.
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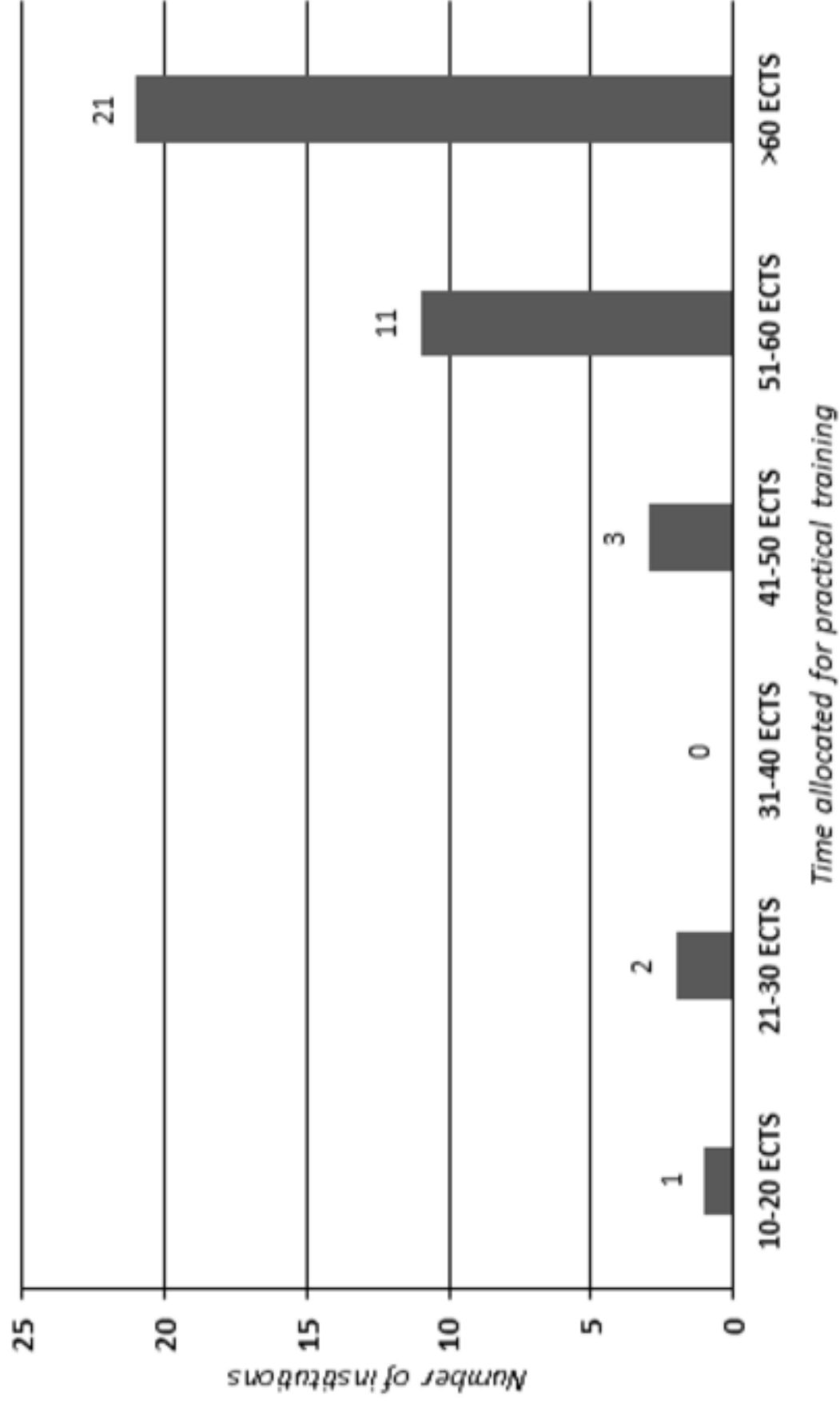


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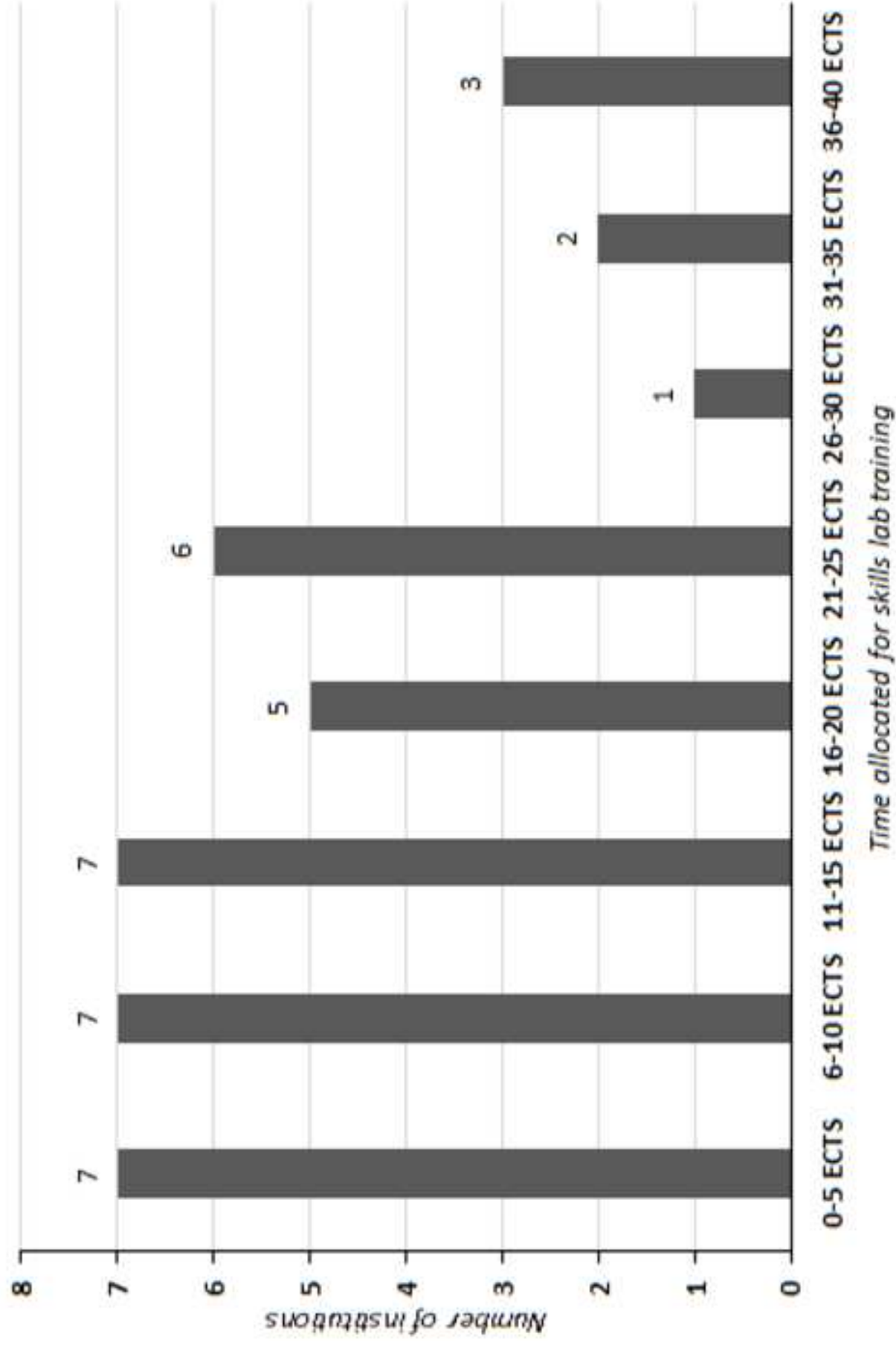


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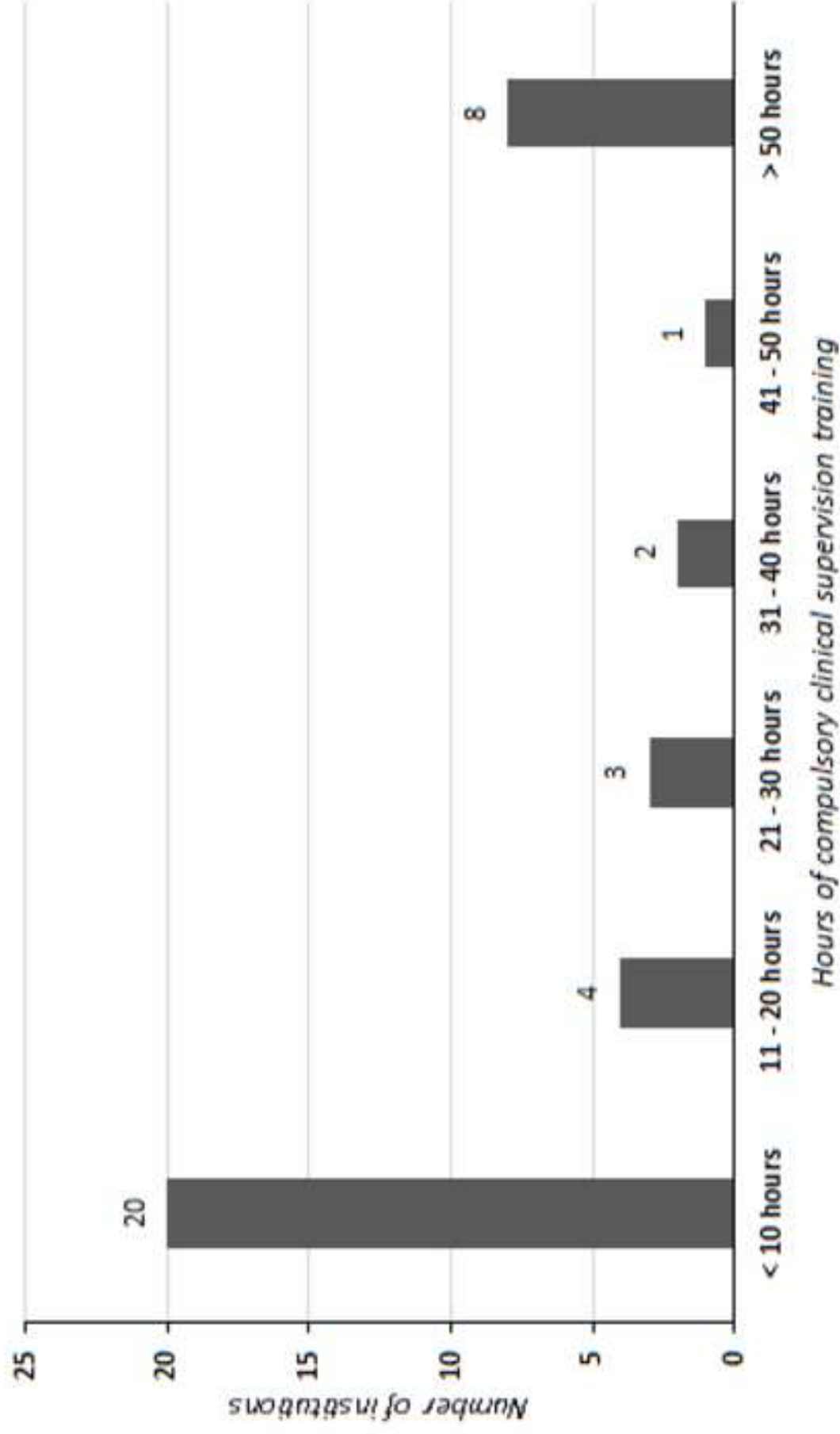


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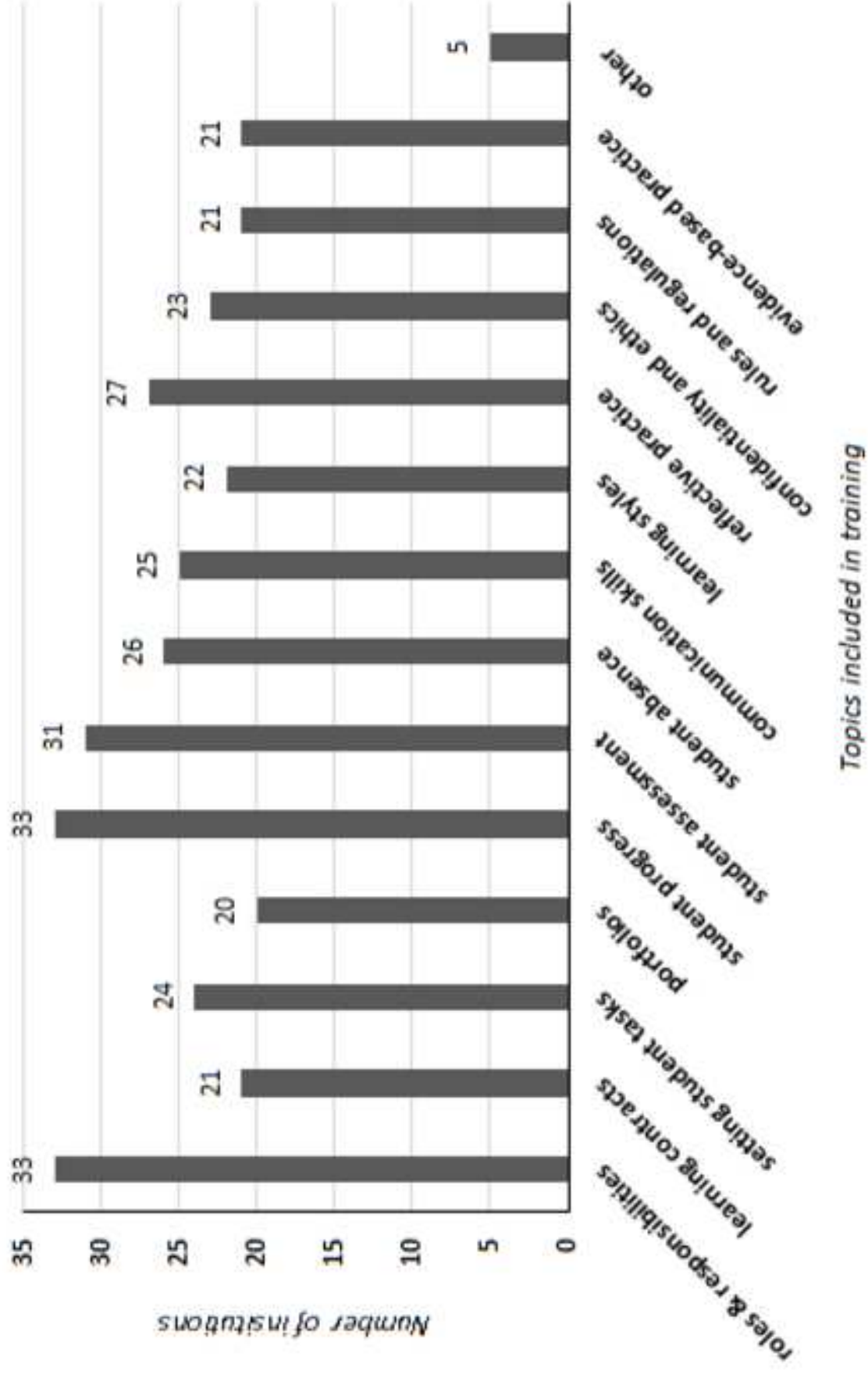


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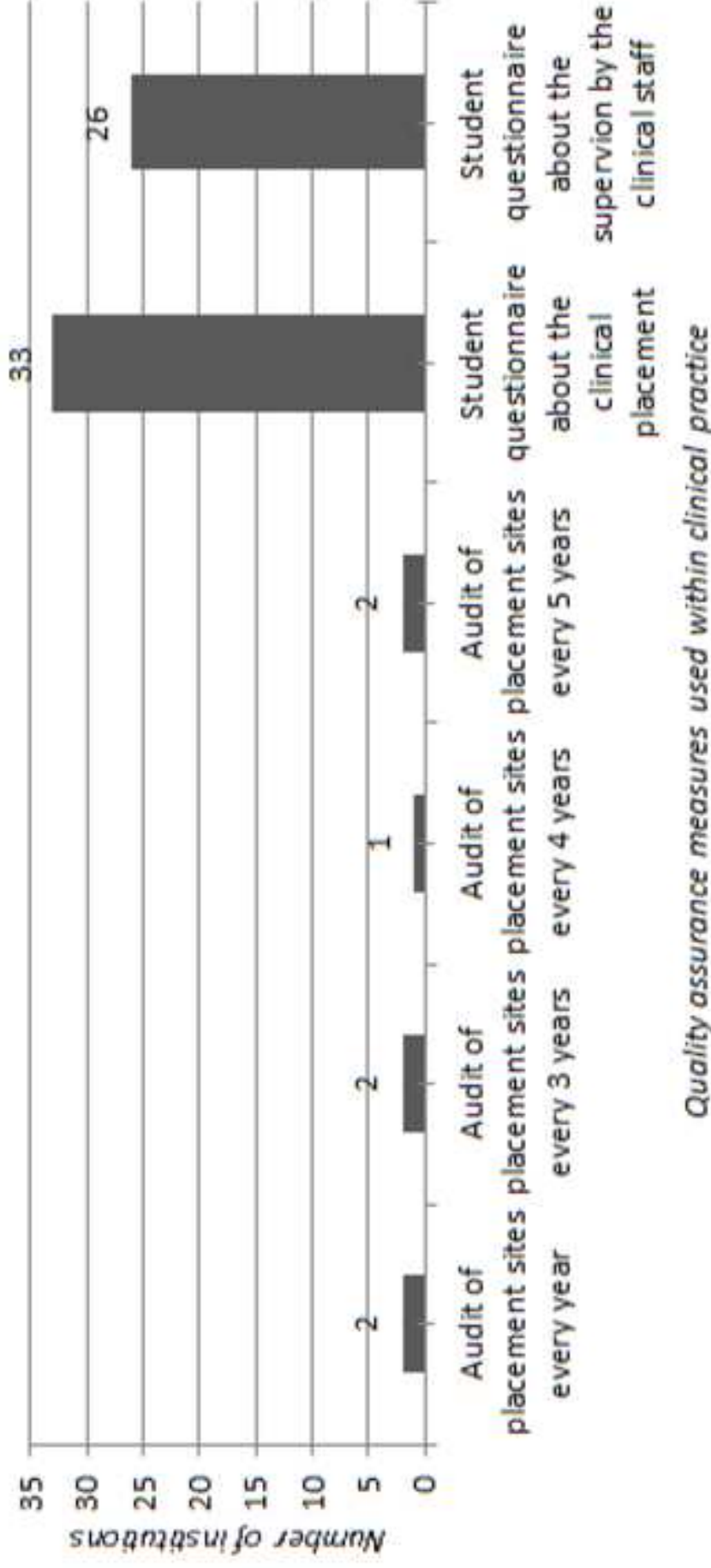
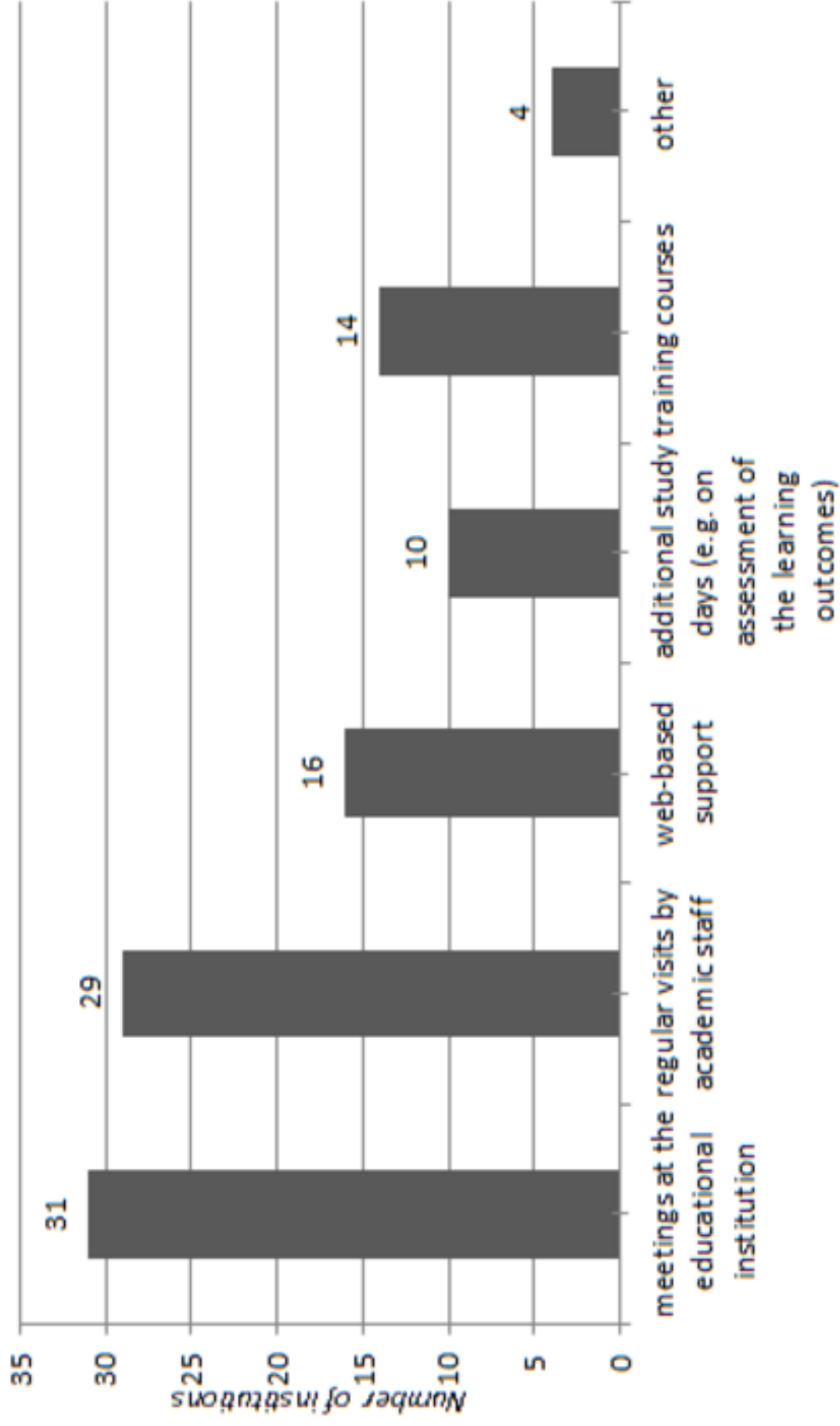


Figure 6
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Types of support opportunities for clinical supervisors

Figure 7
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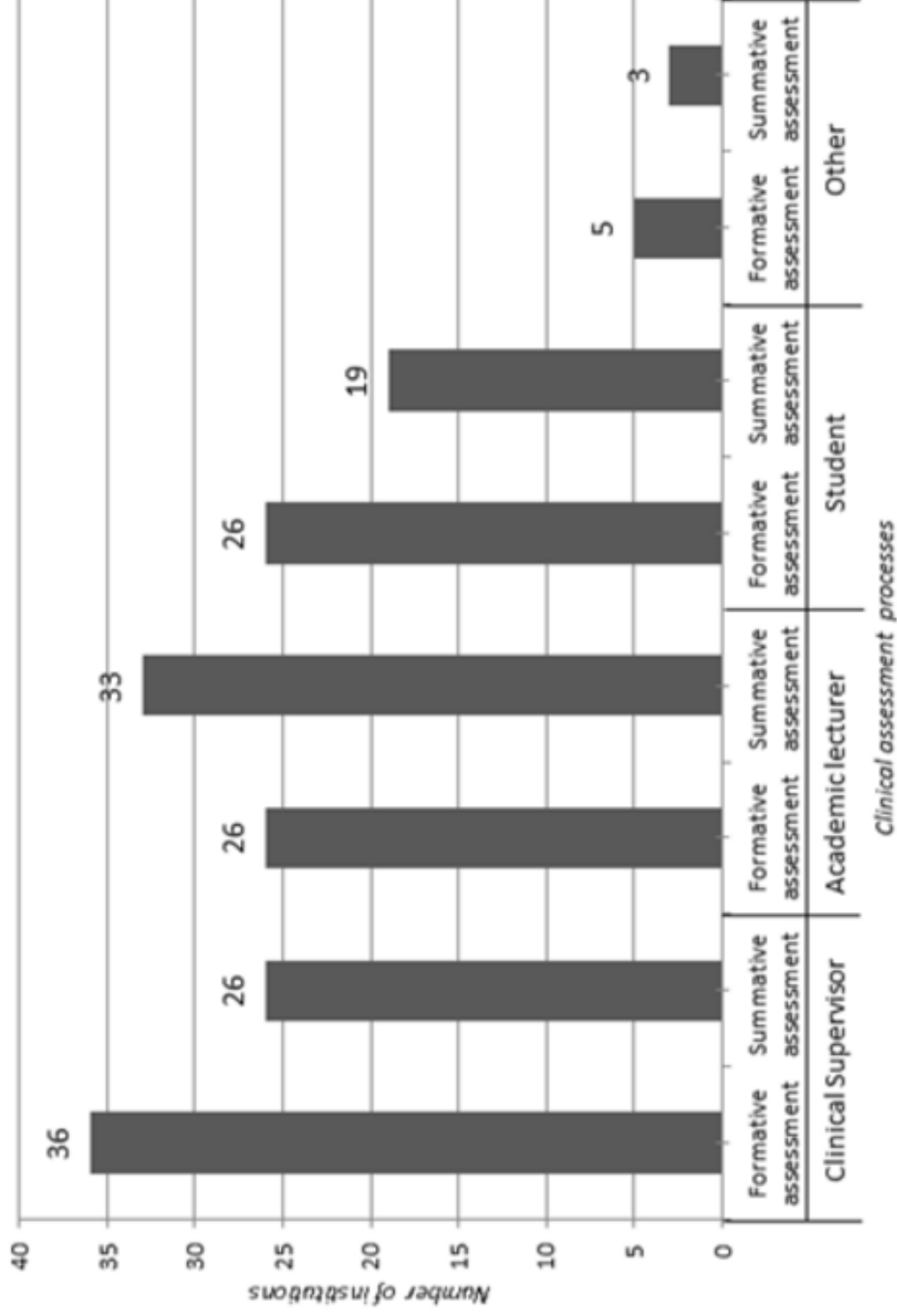


Figure captions

- Figure 1.** Total amount of programme time allocated for practical training
- Figure 2.** Total amount of programme time allocated for practical training in the skills lab
- Figure 3.** Hours of compulsory training required to be a clinical practice supervisor
- Figure 4.** A summary of topics included in training course for clinical practice supervisors
- Figure 5.** A summary of quality assurance measures utility in clinical practice
- Figure 6.** A summary of opportunities for support of the clinical supervisors
- Figure 7.** Who assesses the students formatively and summatively during clinical placement?

Table(s)

Table 1. Responding educational institutions					
Country	Institution	Code	Country	Institution	Code
Austria	FH Campus Wien	AT1	Malta	University of Malta	MT1
Austria	FH Wiener Neustadt	AT2	Netherlands	Fontys UoAS	NL1
Belgium	Institut Paul Lambin	BE1	Netherlands	INHolland UoAS	NL2
Belgium	Odisee UoAS	BE2	Netherlands	Hanze UoAS	NL3
Czech Republic	University of West Bohemia	CZ1	Norway	Buskerud University College	NO1
Denmark	University College Lillebelt	DK1	Norway	Gjøvik University College	NO2
Estonia	Tartu Health Care College	EE1	Norway	Buskerud University College	NO3
Finland	Oulu UoAS	FI1	Norway	Sør-Trøndelag University College	NO4
Finland	Turku UoAS	FI2	Portugal	Escola Superior de Tecnologia da Saúde de Lisboa	PT1
Finland	Helsinki Metropolia UoAS	FI3	Portugal	Escola Superior de Tecnologia da Saude de Coimbra	PT2
Finland	Novia UoAS	FI4	Portugal	CESPU Cooperativa de Ensino Superior	PT3
France	IFNEM Nancy	FR1	Slovenia	University of Ljubljana	SL1
Greece	Technical University of Athens	GR1	Sweden	University of Lund	SE1
Hungary	Semmelweis University	HU1	Sweden	Örebro University	SE2
Ireland	University College Dublin	IE1	Sweden	Jöngköping School of Health Sciences	SE3
Italy	University of Bologna	IT1	Switzerland	UoAS Western Switzerland	CH1
Italy	Università "G. d'Annunzio" Chieti	IT2	United Kingdom	University of Ulster	GB1
Latvia	University of Latvia	LV1	United Kingdom	University of Salford	GB2
Lithuania	Klaipeda University	LU1	United Kingdom	Robert Gordon University	GB3

Table 2. Responsibilities of clinical practice supervisors			
Activities	Regular basis	Sometimes	Not at all
	n (%)		
Teach students	18 (47)	18 (47)	2 (5) BE2, CH1
Monitor the student's progress in the achievement of the learning outcomes	33 (87)	4 (11) GB2, HU1, IT1, NO2	1 (3) CZ1
Provides feedback to the student	36 (95)	1 (3) IT2	1 (3) IT1
Provides the feedback to the educational institution about the progress of clinical placement	31 (82)	7 (18) DK1, EE1, FI1, FR1, NL3, SL1, NO2	0 (0)
Assess the students achievement of learning outcomes in clinical placement	32 (84)	5 (13) CZ1, FR1, PT3, IT2, NO2	1 (3) SE1
Complete the paperwork related to the student clinical training	26 (68)	10 (26) SE2, FI2, NL3, NO3, NO4, PT3, AT2, HU1, IT1, NO2	3 (8) DK1, SE1, FI4
Meet the management of the department about the learning environment	14 (37) SE2, AT1, CZ1, DK1, FI3, GB3, IE2, LU1, NL1, NL2, NO1, PT1, PT3, BE1,	22 (58)	2 (5) SE1, AT2
Organise in house learning opportunities for co-workers about student teaching	9 (24) DK1, FI2, FI3, GB2, LU2, NL2, NO1, PT2, PT3	21 (55)	8 (21) CZ1, EE1, FI1, NL3, NO4, AT2, FI4, GR1
Participate in the time planning of the clinical placement	20 (53)	12 (32) BE2, AT1, CH1, GB3, IE1, NL3, NO1, NO4, SE3, GR1, HU1, NO2	6 (16) FI1, FI2, FR1, SE1, AT2, FI4
Participate in the planning of the course content	8 (21) CZ1, FR1, GB1, LU1, LV1, PT3, IT1, IT2	20 (53)	10 (26) BE2, SE2, FI1, FI2, NL2, NO1, NO3, SE1, AT2, FI4
Assign the student to the departments	17 (45)	13 (34) SE2, AT1, FI3, FR1, GB3, IE1, NL3, PT2, SE3, SL1, AT2, FI4, IT1	8 (21) MT1, BE2, EE1, FI1, NL2, SE1, GR1, HU1

Meet the academic tutor to exchange information about the clinical placement	27 (71)	13 (34) MT1, AT1, CZ1, DK1, EE1, FI1, FR1, NL3, NO4, AT2, BE1, HU1, IT2	0 (0)
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