

Review of Minimum Education and Training Standards in Nursing and Midwifery

Independent desk and stakeholder research:
Synthesis Report



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1. Introduction

The standards for nursing and midwifery education and training in the United Kingdom (UK) are aligned with the EU Directive 2005/36/EC ‘on the recognition of professional qualifications’ (“the Directive”) which establishes minimum EU-wide standards for the education and training of nurses responsible for general care, (“adult nurses”) and midwives. The requirements determined by the EU Directive are outlined in the **Annex** of this report.

The EU requirements have been incorporated into the Nursing and Midwifery Council (NMC)’s pre-registration education standards since 2005. The requirement for the NMC to set standards that comply with the EU Directive ceased when the UK left the EU on 31 December 2020.

In that context, in November 2020, the NMC commissioned two separate, but linked, independent studies to critically explore whether the requirements of the EU Directive are necessary to achieve safe and effective practice, and should therefore continue to be included in NMC standards.

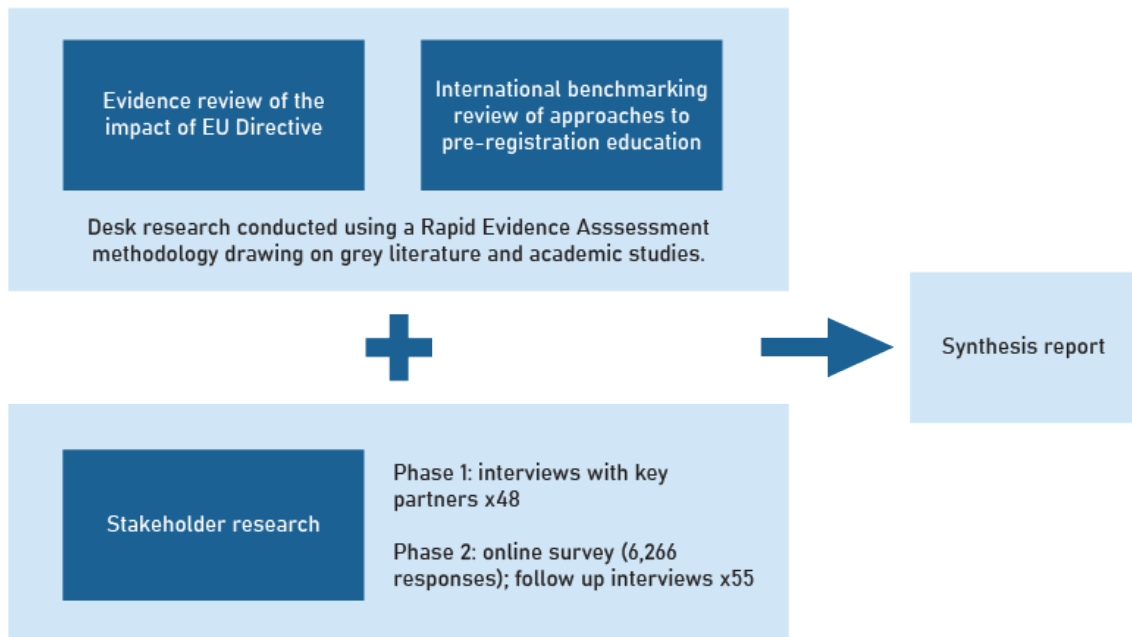
Harlow Consulting conducted a desk review (the ‘**desk research**’), culminating in two reports: 1) exploring the impact and effectiveness of the EU Directive (the ‘**Evidence Review**’); 2) benchmarking approaches to pre-registration education and training in other countries and for other professions (the ‘**Benchmarking Review**’)ⁱ.

Traverse heard from a sample of over 6,300 people, through a combination of interviews and a survey (the ‘**stakeholder research**’) completed by a range of stakeholders, including nursing and midwifery professionals, students, education providers, employers, unions and professional bodies, education and improvement organisations, researchers, Chief Nursing Officers and their Midwifery Officer counterparts.

The key findings from these three reports are assimilated in this synthesis reportⁱⁱ.

ⁱ Ireland, Sweden, Spain, Canada, USA, Australia, New Zealand, Philippines; Medical Doctor, Dentist, Pharmacists, Physiotherapist.

ⁱⁱ Traverse’s stakeholder research findings are drawn from an “in draft” version of the final report, and therefore subject to change.



The desk research and the stakeholder research explored the evidence and stakeholder views on the following:

Themes (EU requirements for pre-registration education programmes)

- General education length and qualifications
- Entry to shortened midwifery programmes
- Recognition of prior learning (RPL)
- Knowledge and skills for nursing and midwifery
- Practice hours and use of simulation
- Programme length and number of academic theory and practice hours

Regulatory outcomes

- Public protection and safety
- Effectiveness and quality of care for people who use services
- Impact on people with different protected characteristics (including nurses, midwives, nursing associates, students and people who use services)
- The experiences and perceptions of nurses, midwives, nursing associates and students
- The number and supply of nurses, midwives, and nursing associates
- Effectiveness, availability, and quality of education programmes.

This report is structured according to the EU regulatory themes as set out in the main Traverse report. Summary findings from each strand of the research (desk and stakeholder) are provided, with evidence and views from the perspective of nursing and midwifery presented separately. For each theme, the summaries of the desk and stakeholder research are followed by a boxed synthesis of what evidence from the desk review and views from the stakeholder research indicate in terms of the whether key regulatory themes should be retained, removed or changed, points of consensus and divergence and an indication of next steps for the NMC to consider. The final sections summarise the findings on the impact of the EU Directive on the regulatory outcomes and, from the stakeholder research, on the potential impact of any changes.

With regards to the **stakeholder research**, it should be noted that the achieved sample, while considerable in size (c.6,300 people) and broadly reflective of the UK nursing and midwifery registrant populations was self-selecting. People who took part were likely to be engaged with the subject matter and were those who were willing and able to give their time.

Where the findings refer to views of 'key partners' this refers to the NMC's key stakeholders who were interviewed in depth in the first phase of the research. This largely consists of education providers or those with senior policy roles relating to education and training. Where the findings refer to 'nursing stakeholders' or 'midwifery stakeholders' this refers to survey respondents and those who took part in follow up interviews to provide more depth on their views.

Full methodological details of each study are contained in their respective reports.

2. General education length and qualifications

Findings from the desk research

For **nursing** pre-registration education, specific entry requirements to courses vary enormously between countries and individual HEIs.

Typically, however, **10-12 years of compulsory schooling is the minimum expected requirement** to be admitted to a nursing education programme, internationally.

Admissions to nursing degrees are usually dependent on completion of advanced level qualifications taken at the end of compulsory education. This involves either **completion of a high school certificate** (such as in Ireland, USA, Canada, Australia and New Zealand), or qualifications like **A-levels or the International Baccalaureate**.

National regulatory bodies rarely publish specific rules around admissions and progression requirements (such as school grades or subjects). **Admissions and progression criteria are almost always set by individual institutions**, rather than regulators.

In terms of widening access, some countries (notably Australia and Ireland) offer flexible modes of entry for **nursing** courses. In **Australia**, this includes **facilitated modes of entry** for students from rural or low-income backgrounds.¹

For **midwifery**, there are **two broad models** of pre-registration education, internationally. **Both of these models are consistent with the requirements of the EU Directive**.

Direct-entry, degree-level training for midwives (such as in Ireland, Australia, New Zealand, or Canada). Admissions criteria for these courses are similar to those for the Bachelor's degree in nursing. Candidates need to have completed between **10-12 years of compulsory schooling** and **grade and subject requirements are similar to those for nursing**.

Postgraduate training (such as in Spain, Sweden, or USA). These courses are only available to registered nurses (or other healthcare professionals) and candidates need to have already completed a Bachelor's degree.

The Evidence Review found no direct evidence of the impact of entry criteria for nursing and midwifery programmes. However, a 2015 evaluation of the NMC's pre-registration education standards found broad support for the current entry criteria, although respondents suggested they could be tightened to achieve greater consistency between AEs.²

Findings from the stakeholder research

Most key **nursing partners** said that the NMC should continue to align with the EU's general education requirements, because they help to ensure a minimum level of educational attainment and support public confidence in the profession. However, some said that, in the interests of widening accessibility, there should be pathways for applicants with atypical backgrounds who may not meet these requirements.

Most **nursing stakeholders** said that both the 12-year and 10-year options for entry into pre-registration courses should be retained. Those who said they should be amended argued that this would widen access to the profession and enable candidates with

strong personal qualities to become nurses. However, those who were in favour of maintaining or strengthening existing requirements said that candidates must be able to meet the academic demands of the programme and that this would protect standards of nursing and patient safety.

A minority of key **midwifery partners** suggested that the requirements for entry to pre-registration midwifery programmes could be raised, in recognition of the stringent requirements of the programmes.

Meanwhile, most **midwifery stakeholders** supported maintaining the existing entry requirements for Route A (Direct Entry). Those who said they should be amended argued that this could help to widen access to the profession.

Summary: general education length and qualifications

Evidence from key partner and stakeholder research suggests that the current requirements are satisfactory to all. Evidence from desk research suggests that current general education requirements are broadly in line with international practice in the comparator countries studied. Although specific entry requirements – such as subjects studied or grades achieved in school – vary considerably between individual HEIs, general education requirements for admission to nursing and midwifery courses are broadly consistent across comparator countries.

There is some appetite amongst key partners and stakeholders to consider exceptions/flexibility to the 12- and 10-year requirements in the UK, with a view to widening access into both nursing and midwifery professions. Although desk research identified a select number of countries with facilitated modes of entry to nursing courses, it did not identify any evidence to demonstrate the effectiveness or implications of widening access.

On balance, there appears to be no significant rationale or desire for change to education requirements for nursing or midwifery (except for in specific cases), either in the evidence base or from the stakeholder research.

3. Shortened courses

Findings from the desk research

The Benchmarking Review found that, in the USA and Canada, shortened or accelerated **nursing degrees** are available for second-entry students, or for graduates who already hold a Bachelor's degree in a separate (non-nursing) discipline.³

The Benchmarking Review also found that, in 2 of the countries studied, **shortened or bridging nursing courses** are available to students who complete pre-degree level training in nursing. In USA, graduates of the Registered Nursing Diploma or the Associate Nursing Degree can complete Bachelor of Science in Nursing (usually 4 years) in 2 years.⁴

In Spain, **bridge courses** can be taken by students who complete the 3-year Orientation Course in nursing (the only nursing course that existed before the introduction of the 4-year degree in 2009), which **brings the Orientation Course up to the level of the Bachelor's degree in Nursing**.⁵

The Evidence Review found no recent literature on the impact of shortened courses for nursing, which confirms a lack of evidence on the subject.

The Benchmarking Review found that **shortened midwifery programmes** – available for registered nurses through advanced standing status – **are common in different countries**, such as Ireland and Australia.

The Benchmarking Review also found two countries which offer shortened midwifery courses to other healthcare professionals, besides nurses. In New Zealand, **shortened midwifery courses** can be undertaken by **registered practitioners of other healthcare professions**,⁶ while in Canada, shortened midwifery courses are offered to **graduates of similar health fields** with experience in labour and birth delivery.⁷

Shortened midwifery courses are only offered for **direct-entry, undergraduate education**. Shortened courses are not possible in countries where the education of midwives is undertaken as specialist, post-nursing education.

The Evidence Review found one study on shortened programmes for midwifery.⁸ This study confirms that there exists a lack of evidence on the subject, but also highlights that student nurses on shortened midwifery programmes bring skills that are vital to midwifery.

Findings from the stakeholder research

Key partners were mostly supportive of allowing all fields of nursing to access shortened **midwifery** programmes – as all were thought to have transferrable learning. It was felt that widening access would make shortened programmes more sustainable as they are often undersubscribed. Some felt that non-adult nurses could bring specific skills that could improve standards of care, but others felt their skillsets were too specialised. Some would rather encourage applicants from other health professions (e.g. paramedics). It was suggested that before considering whether a shortened course would be appropriate, midwifery outcomes should be clearly mapped against other healthcare disciplines. Consideration should be given to four nations implications (e.g. the need for close alignment between Northern Ireland and the Republic of Ireland to enable midwives living and working on

opposite sides of the border to easily register in their country of practice) before any changes are made.

Most **midwifery** stakeholders supported retaining the current entry requirements for shortened midwifery programmes and this was largely consistent across the four nations. Most felt that only adult nurses had skills which were transferable to midwifery and that other nurses or healthcare professionals would struggle to become competent in a shorter timeframe. A few wanted to discontinue the short course altogether, as they felt even adult nurses could not become competent within the timeframe. Those who supported changing requirements argued that learners from a wide range of disciplines would bring skills that would expand the knowledge and skills base of the profession.

Summary: entry to shortened programmes

Evidence on **shortened programmes for midwifery** suggests that while key partners and some wider stakeholders see benefits to opening access to other fields of nursing (non-adult), in terms of widening access and diversifying the skill base of the workforce, the majority of stakeholders do not support this.

Although desk research identified a number of countries which offer shortened midwifery courses to a broader range of health professionals than just nurses, the desk research did not identify any research into the potential risks or benefits of such an approach.

On balance, there are mixed views and limited evidence around shortened programmes for midwifery. Therefore, any proposals in this area for midwifery would need to be carefully explored with relevant stakeholders.

4. Recognition of Prior Learning (RPL)

Findings from the desk research

Although the EU Directive permits the provision of RPL for pre-registration **nursing** programmes, the Directive does not specify what proportion of a nursing programme can be substituted for recognised prior learning or training.

The Benchmarking Review found that, outside of Europe, RPL is generally permitted for **nursing** programmes, but that education standards rarely set out precise rules around the modules, learning outcomes or proportion of a course that can be accredited. Decisions regarding RPL are typically made by education institutions.

In **New Zealand**, national standards for **nursing** education set out specific guidelines for RPL. For nursing, RPL may be granted for prior qualifications, work and life experience, but no credit can be granted for clinical experience papers in the third year of the course.⁹

For **midwifery**, RPL is not permitted in the EU and the Directive makes no reference to the provision of RPL.

The Benchmarking Review found that, outside of Europe, RPL is rarely offered for midwifery courses and, where it is, this is only for direct-entry midwifery courses. RPL is not permitted where midwifery pre-registration education takes the form of post-graduate training available only to registered nurses.

The Benchmarking Review also found that, in **New Zealand**, national standards for midwifery education set out specific guidelines for RPL. For **midwifery**, up to 200 practice hours may be credited as RPL by HEIs without the approval of the Midwifery Council.¹⁰

The Evidence Review found no studies on the impact of RPL for either nursing or midwifery, which confirms a lack of evidence on the subject.

Findings from the stakeholder research

Almost all key partners supported RPL for **nursing** to widen access to the profession and address staffing shortages. Most nursing stakeholders supported aligning the approach to RPL across both professions in the interest of consistency on the part of the NMC.

Most stakeholders also supported RPL for **nursing** – there was little variation in this across the four UK nations. Allowing RPL was thought to widen access to the profession, leading to a more diverse workforce and more recruitment.

Among those opposing RPL for nursing, reasons were:

- Most prior learning would not be relevant to nursing given the specific demands of the profession;
- All nursing students should receive the same training in order to uphold standards;
- RPL puts all students (both with and without RPL) at a disadvantage, as those without RPL would incur greater costs in terms of student fees and maintenance loans, while those with RPL would be expected to achieve the same learning outcomes within a reduced timeframe.

Most key partners in **midwifery** supported introducing RPL to facilitate the diversification of the workforce and to accelerate recruitment. However, they said there is a need for NMC guidance on the types of prior learning appropriate for midwifery. They were largely against alignment with nursing on RPL, wanting distinct guidance specific to the profession.

Most stakeholders also supported introducing RPL for **midwifery**, as part of an effort to remove barriers to candidates with transferrable skills entering midwifery. However, they suggested that guidance or a cap on RPL would be necessary.

Among those opposing RPL for midwifery, reasons were:

- Any prior learning would necessarily be irrelevant to midwifery, given the uniqueness of the profession;
- All midwifery students should receive the same training in order to uphold standards;
- RPL would need to be assessed on an individual basis, and as such would be difficult for AEs to coordinate;
- It is unnecessary given the existence of the shortened midwifery course (although the shortened course is an example of advanced standing, rather than RPL, and is limited to first level adult nurses – see section 3).

Summary: RPL

Evidence on **RPL for nursing** suggests the current approach is generally supported by stakeholders. Desk research found that, although RPL is generally permitted for nursing courses in other countries, education standards rarely publish specific guidelines on RPL and no research has been identified into the impact of RPL.

On balance, in the absence of a compelling evidence base from the desk research, there does not appear to be a clear need for change in relation to RPL for nursing.

Evidence on **RPL for midwifery** suggests that stakeholders see a case for considering the introduction of RPL for direct entry midwifery. However, the desk research found few examples of RPL being offered for midwifery courses. Stakeholders' emphasis on the need for clear guidance on RPL, if introduced for midwifery, aligns with the approach in New Zealand as described in the desk research.

On balance, there are mixed views and limited evidence around RPL for midwifery. Therefore, any proposals in this area for midwifery would need to be carefully explored with relevant stakeholders.

5. Knowledge and skills for nursing and midwifery

Findings from the desk research

The content of international **nursing** programmes varies hugely in levels of specificity.

The Benchmarking Review found that **education standards** for **nursing** are typically **aligned to countries' national core competencies**, published by regulatory bodies, which set out what graduate nurses must know and be able to do upon entering the profession. This approach is broadly similar to that in the UK, where NMC set the standards of proficiency for safe and effective practice to be achieved at the point of registration.

The Evidence Review found one study which reported on various **gaps in the content requirements of the EU Directive for nursing**. A 2020 mapping exercise conducted on behalf of the EU, which explored the requirements for nursing in all EU countries, identified deficiencies in a number of skill areas in the EU Directive, including: **person-centred care theories; inter-/multidisciplinary theories; management theories applied to nursing; evidence-based practice; technical progress (e.g. e-health)**¹¹. Most of these skills are, however, covered in NMC's Standards of Proficiency for Nurses.ⁱⁱⁱ

The Evidence Review also found three studies which call for **enhanced bioscience content in UK pre-registration nursing programmes**^{12,13,14}.

The Benchmarking Review found that, for **midwifery**, education standards tend to be much more prescriptive in content. As with the EU Directive, standards for the education of midwives outside of Europe generally specify precise practical learning objectives, such as a set number of births, care visits or clinical assessments required to be achieved.

An EU commissioned evaluation of the Directive for **midwifery** (2016) found the minimum training requirements needed to be updated and centred on more contemporary language, and the content revised to be more focused on communication and social skills, research, evidence-based practice, midwifery led care, normal birth and labour, breastfeeding, medicine, management and informed consent/choice.¹⁵ The NMC's Standards of Proficiency for Midwives largely exceed the EU requirements and cover many of these skills which have been found to be lacking from the Directive.^{iv}

ⁱⁱⁱ Person-centred care, interdisciplinary working, leading and managing nursing care, evidence-based practice and using digital technologies are all identified in NMC's most recent Standards of Proficiency for Registered Nurses: NMC, 2018, Future Nurse: Standards of Proficiency for Registered Nurses: <https://www.nmc.org.uk/globalassets/sitedocuments/education-standards/future-nurse-proficiencies.pdf>

^{iv} Communication, using and applying research, evidence-based practice, promoting and supporting breastfeeding, medicines administration and optimisation are all highlighted in NMC's most recent Standards of Proficiency for Midwives: NMC, 2019, Standards of Proficiency for Midwives: <https://www.nmc.org.uk/globalassets/sitedocuments/standards/standards-of-proficiency-for-midwives.pdf>

A 2018 mapping exercise by the European Midwives Association suggested the language of the Directive needed updating to reflect

the ICM definition of the midwife and the Framework for Quality Maternal and Newborn Health from the Lancet series on Midwifery¹⁶.

Findings from the stakeholder research

Many key **nursing** partners were in favour of the skills requirements being reviewed, in order to account for changes in how healthcare both is and will be delivered. Some said that changes might give greater scope to respond to specific regional and national needs. There were mixed views about whether to expand generalist training or to extend the field-specific requirements. Some were also keen to assess the impact of the Future Nursing Standards on the quality of graduates and safety and effectiveness of nursing practice before considering changes.

The majority of **nursing stakeholders** said that the knowledge and skills specified in the EU Directive were necessary for safe and effective care. However, there was some appetite to review and update the requirements, with several stakeholders calling for a greater emphasis on practical training and the real-life application of skills, as well as a more detailed knowledge of anatomy and physiology. Several also felt that learning disabilities should be included in the requirements. However, it should be noted that such changes have already been integrated in the NMC's current standards of proficiency. This, suggests that some stakeholders are not as familiar with the new NMC Standards of Proficiency for nursing and midwifery.

Some key partners supported reviewing the skills and knowledge requirements for **midwifery**, but the

question of the specified 'numbers' was acknowledged to be complex and controversial. While some felt that the numbers supported consistency and were helping to support safe and trusted services, others said they do not adequately measure the competence of student midwives or help them to support a woman in her whole journey through maternity care. Some endorsed a mixed approach, with minimum numbers set alongside an increased focus on outcomes and competencies.

Most **midwifery** stakeholders agreed that the knowledge and skills specified in the EU Directive were necessary for safe and effective midwifery care and that the NMC should continue to specify the number of occasions on which skills must be performed. However, they had mixed views about the current numbers and many suggested different ways in which these might be reviewed and amended, with the most common suggestions being that they should be lowered and/or that there should be an emphasis on the quality of skills performance rather than quantity. A small number called for moving away entirely from minimum numbers in favour of taking a more holistic view where there is a greater focus on antenatal and postnatal care rather than numbers of births.

Summary: knowledge and skills

For both **nursing** and **midwifery**, stakeholders found that the skills and knowledge content specified in the EU directive was appropriate but in line with the findings of the evidence review, felt that there were gaps in the knowledge and skills and the language needed to be modernised. In the UK, these knowledge and skills gaps are already met and are often exceeded within the standards of proficiency.

For **midwifery**, the EU directive goes further by stating the number of occasions on which skills need to be performed. There were conflicting views amongst stakeholders about the specific numbers of occasions a skill is performed. While evidence from the desk research and the views of stakeholders strongly indicate that setting specific numbers is desirable, there is no evidence and little consensus on what these should be. Both the stakeholder research and desk research found some support for a more outcomes-focused approach.

6. Practice learning hours and use of simulation

Findings from the desk research

In Europe, the EU Directive places restrictions on the use of simulation in **nursing** education because of the way it defines clinical practice as ‘in direct contact with a healthy or sick individual.’ Henriksen et al., who examined the impact of the EU Directive on clinical practice in nursing education in the Nordic Countries, point out that this definition places limitations on the use of simulation, such that ‘the directives can be seen in this respect as a hindrance to pedagogical development.’¹⁷

The Benchmarking Review found that, outside of Europe, **most countries’ standards for nursing** education make no explicit statement on simulation. In America, however, up to 50% of clinical practice in **nursing** courses can be substituted for simulation.¹⁸ In Australia and New Zealand, standards state that **practice hours in nursing** must be exclusive of simulation.¹⁹

For **midwifery**, the EU Directive permits use of simulation only in **specific scenarios** (performance of episiotomies, breech births and initiation into suturing).

The Benchmarking Review found that, outside of the EU, **most countries’ standards for midwifery** make no explicit statement on the role of simulation. In Australia, standards for **midwifery** state that **simulated practice is not permitted in place of practice hours**.²⁰ In New Zealand,

simulation may account for up to 240 hours of practice placements in **midwifery** education.²¹

Simulation represents a growing area of research in **nursing** education. Research into simulation in midwifery education is far scarcer.

Empirical evidence on the effectiveness of simulation in **nursing** education compared to other pedagogical approaches remains limited. While there is evidence to suggest that simulation can increase students’ knowledge, confidence and satisfaction levels, **more research is needed to explore the transferability of simulation learning to real patient situations**.²² Studies do not tend to report on the impact on clinical outcomes²³.

The most robust study identified in the Evidence Report is a high-profile American study, which measured the effect of replacing either 25% or 50% of students’ total clinical hours with simulation on 10 **nursing** programmes. The study found no meaningful difference in the overall performance of students who experience simulated clinical teaching, compared to those who receive traditional clinical experiences. The study concluded that up to 50% of clinical hours can be replaced by simulation²⁴.

Research conducted in the USA and Australia has also revealed inconsistencies in the design, implementation and assessment methods used for simulation in **nursing** education. The lack of a consistent approach in the use of

simulation – and lack of a standard definition of simulation learning - means that it is difficult to evaluate the contribution of simulation education to students meeting their learning outcomes.^{25, 26}

Findings from the stakeholder research

Key nursing partners were broadly supportive of simulation. It was seen to protect patients from harm by giving students opportunities to learn, rehearse and gain confidence and competence. However, there was concern that the use of simulation may replace practice and could be overused. Another challenge was the high cost of developing the technology, which could result in unequal access to the latest equipment.

A majority of **nursing stakeholders** were supportive of simulation counting towards both practice and theory hours. Many said that it builds confidence and competence whilst providing opportunities for group learning, feedback and reflection. However, many felt that simulation could not be a substitute for real-life practice. A small majority felt that use of simulation in assessments should be limited to certain skills and procedures, while just over a third did not feel that limits were necessary. Many supported a greater role for simulation so long as it is used in a proportionate way, which enhances real life-practice, with clear criteria and checks and balances in place.

Key midwifery partners were in favour of simulation overall, particularly for giving students exposure to rare learning experiences, and practising repetitive tasks. But many felt training should develop communication skills and 'hands-on' learning, and had

reservations as to whether simulation could really facilitate this. Therefore, there was caution about the *extent* to which simulation could replace practice hours.

Midwifery stakeholders highlighted simulation's value in confidence building, supporting patient safety, allowing group learning and providing opportunities for feedback and reflection. A majority were supportive of simulation counting towards both practice and theory hours. However, many were concerned about the prospect of simulation replacing real-life practice, which was seen as essential for learning key skills. There were calls for robust checks and balances on its use. In the survey, a small majority felt that the use of simulation in assessment should be limited to certain skills and procedures, while just over a third did not feel that limits were necessary.

Summary: practice learning hours and the use of simulation

For **nursing**, evidence from the stakeholder research indicates a strong appetite for greater use of simulation, with the benefits identified by stakeholders corresponding with those identified by the desk research. A key concern for stakeholders is around the transferability of skills learned in simulation into real-life practice – which is also a key gap in the evidence base. Another theme from both strands of research is the variation in how simulation is used in learning and assessment.

For **midwifery**, stakeholder sentiments support greater use of simulation, but at the same time emphasise the belief that some skills can only be fully honed in practice (as opposed to simulation), therefore, there was caution about the *extent* to which simulation could replace practice hours.

In summary, the research confirms that simulation is a topic worthy of further consideration, including research into impacts of simulation on registrants' competence to deliver healthcare in real life contexts, and evaluation of current approaches to simulated learning and assessment to identify best practice.

Stakeholder engagement on this topic will need to provide assurance that simulation is being considered as supplementary and supportive of learning, not a wholesale substitute for learning through contact with real patients/women and families. Particularly for midwifery where the evidence base is more limited and therefore stakeholders may be more cautious (although some procedures are already assessed in simulation in accordance with the EU Directive).

7. Programme length and number of hours

Findings from the desk research

The Benchmarking Review found that, internationally, 3-4 years of degree-level, undergraduate training is the norm for pre-registration education for **nurses**. While total learning hours for nursing courses taught in the EU are determined by the EU Directive (4,600 hours), most countries outside of the EU do not specify a precise total number of learning hours.^v

While the length of **nursing** education programmes (3-years minimum) is broadly consistent with those in comparator countries, they are notably shorter than three of the four comparator professions in the UK. Doctors and Dentists study for five years, Pharmacists for four years.

Outside of Europe, the minimum **clinical practice hours** for **nursing** pre-registration education are generally lower than the hours mandated by the EU Directive (Australia: 800²⁷; New Zealand: 1,100²⁸).

According to the Evidence Review, recent research has concluded that there exists no evidence to equate a set number of practice hours with the development of clinical competence. Research conducted in the USA – into **nursing** education – found no observable correlation between the minimum number of practice hours, mandated by different US states, and **student performance on the NCLEX exam**.²⁹

The Benchmarking Review found that, for **midwifery**, direct-entry, degree level pre-registration education typically lasts between 3-4 years. In countries where pre-registration education for midwifery takes the form of **specialist, post-graduate education** – which is open only to registered nurses, such as in Sweden, Spain and USA – 1.5-2 years is typical.

Minimum practice hours for **midwifery** education internationally are influenced by the **International Confederation of Midwives' Global Standards for Midwifery Education**, which stipulates that '*The midwifery curriculum includes both theory and practice elements with a minimum of 40% theory and a minimum of 50% practice*'.³⁰ These standards do not stipulate a number of hours, which means that the prescribed number of clinical hours for midwifery education varies by country.

Recent Australian research into **midwifery** education has contended that the allocation of a set number of practice hours engenders a 'tick-box' mentality, encouraging students to focus on 'chasing the numbers', rather than on providing quality care to women. These studies suggest that there is **no straightforward, causal link between practice hours and clinical learning outcomes**, indicating that an increase in the mandatory number of practice hours does not guarantee competent graduates.³¹

^v Canada, Australia, New Zealand.

Findings from the stakeholder research

Key partners strongly supported the 3-year programme length for **nursing** but would like a review of the hours requirement; some focusing on total hours and others on the theory/practice split. However, any reduction in hours was seen to risk a perception of reduced safety or quality of care, and was considered a risk given the increasing complexity of patient needs.

Nursing stakeholders said the NMC should continue to specify both a minimum programme length and number of hours, and that the current requirements are necessary to achieve the standards of proficiency. Those who were in favour of reducing the number of hours identified a range of benefits including improved quality and availability of placements and reduced student workload. Most said that the time required to achieve the standards of proficiency should be based on competency and outcomes, rather than number of hours. Many held this

view on the basis that number of hours is not a guarantee of competence.

Key **midwifery partners** were strongly against any reduction in length, hours or practice hours for midwifery. Any reduction was seen to make it difficult to cover all of the learning outcomes in the Future Midwife Standards and therefore to pose risks to safety and quality of care, especially as midwives tend to work as autonomous practitioners.

A majority of **midwifery stakeholders** said the NMC should continue to specify minimum programme length and number of hours and felt that the current requirements for direct entry and short courses (2 years/18 months) are sufficient for students to achieve proficiency, although fewer were sure of the sufficiency of the requirements for the 18-monthcourse. A majority of survey respondents support a competency and outcomes-based approach, rather than number of hours.

Summary: programme length and number of hours

The desk research finds that the current programme length for pre-registration programmes is comparable with other countries and the stakeholder research suggests it is largely acceptable to stakeholders.

However, the desk research also reveals that, for **nursing** education, there exists considerable variation in the prescribed minimum practice hours between comparator countries, and that practice hours in countries outside of the EU are generally lower than those mandated by the EU Directive.

The evidence from the desk research supports the views of many stakeholders that a certain number of practice hours does not equate to competence. Both desk and stakeholder research also identify the risk that setting a number of hours does not support meaningful learning experiences or quality learning outcomes.

Nonetheless there is support from stakeholders for the NMC to continue to set a number of minimum hours, especially for **midwifery** (as is the case in international practice).

On balance, it does not appear that there is a strong argument for changing programme length, for either nursing or midwifery.

In relation to hours there is more of a case for further consideration of change, based on what appears to work in comparator countries and on the views of many stakeholders that outcomes should take precedence over number of hours in terms of assessing competency. Any reduction in practice hours would need to be explored sensitively with regards to concerns about potential implications for patient care and public perception.

8. Impact of the EU Directive

The key outcomes of interest for the NMC (as listed below) are not well addressed in the literature, specifically within the context of the EU Directive. Some of the outcomes are broad and may be influenced by various factors in combination – social, political, economic – therefore the impact of the EU Directive is likely to be extremely difficult to measure. Assessments of the impact of the Directive are also made all the more challenging by the fact that some countries' associated standards for education (for example, the NMC's standards of proficiency) surpass some of the element of the EU requirements, meaning that health and learning outcomes may owe themselves more to effectiveness of an individual country's standards than to the EU Directive. This may be why the subject is not well researched.

Public protection and safety

The Evidence Review found that the subject of public protection and patient safety appears more generally in the UK-based literature, but the findings are not extrapolated to the context of the EU Directive. These studies often focus on specific areas of education or practice, for example, the embedding of theory and practice in the teaching of handwashing and disposal of PPE; closing a perceived theory-practice gap around infection control; and incorporating intentional rounding in education programmes.³²

Nursing stakeholders who addressed this matter emphasised that public protection and safety must remain the highest priority when considering making any changes. Some suggested that any revised NMC Standards should attempt to increase or enhance public protection and patient safety and some had a concern that diverging from the EU Directive risked undermining public protection and safety.

Midwifery stakeholders also stressed that public protection and safety should be a paramount concern when considering making any changes. Some again voiced concerns that diverging from the EU Directive could lead to a lowering of education standards, which had the potential to impact on the safety of services and on public protection (e.g. should the minimum programme length become shortened, or the minimum number of practice hours be significantly reduced).

Effectiveness and quality of care for people who use services

The literature tends to focus on the perspective of user involvement in student recruitment and assessment, for example.^{33,34} Neither the Evidence Review nor the Benchmarking Review found any evidence meeting the inclusion criteria that pertains specifically to effectiveness and quality care within the context of the impact of the EU Directive.

Alongside upholding patient safety, nursing stakeholders who addressed this matter stated that effectiveness and quality of care were of paramount importance and should be driving all of the decisions to be made.

Midwifery stakeholders also felt that effectiveness and quality of care should be ‘front and centre’ when considering any changes. While some voiced concerns that diverging from the EU Directive might have a negative impact on this area, others felt that diverging from it provided an opportunity to raise the requirements, which would have a positive impact on the effectiveness and quality of midwifery care. This could be brought about providing changes were driven by the specific and future needs of the UK, and by embracing the latest evidence base, and technological innovations in terms of learning (e.g. use of simulation, distance learning approaches).

Impact on people with different protected characteristics

This subject does not arise often in the literature. The Evidence Review found one UK study which reported on the experiences and outcomes of undergraduate health professional students with protected characteristics. The study reported on academic difficulties encountered by students with learning difficulties,^{vi} as well as on the challenges faced by ethnic minority students in undergraduate healthcare education, chiefly language barriers hampering progression or completion.³⁵ The Benchmarking Review also found evidence – from an American study into the experiences of English as-a-Second Language (ESL) students on pre-licensure nursing programmes – that language ability can act as a barrier to progression.³⁶ In terms of making education more inclusive, the Benchmarking Report found some recent evidence from New Zealand, exploring the experiences of Maori undergraduate nursing students, which emphasised the need for institutions to provide culturally safe and supportive environments, as well as services such as peer mentoring and academic support.³⁷

^{vi} Learning difficulties were dyslexia, dyspraxia and dyscalculia.

Many of the nursing stakeholders who addressed this matter voiced concerns that diverging from the EU Directive might see less consideration given to people with protected characteristics. Many also stated that the UK needs to continue to adhere to the Equality Act and equivalent legislation for Northern Ireland, and remain committed to valuing and considering equality, diversity and inclusion, which they saw as fundamental to delivering nursing in the UK. Several stakeholders on the other hand expressed confidence that the needs of groups with protected characteristics would continue to be a priority for those at the NMC and some had the view that the rights of people with protected characteristics are already protected under UK law. Some stakeholders suggested the diverging from the EU Directive could potentially give educators greater scope and flexibility to be responsive to the needs of people with protected characteristics in terms of course design and in terms of establishing alternative pathways to entry.

In terms of midwifery stakeholders, several again emphasised the importance of continued compliance with existing equality legislation and for the need to continue taking into account the needs of people with protected characteristics and other marginalised groups when setting education and training standards. Several had a concern that following Brexit, the UK might be tempted to “water down” its commitments associated with equality legislation or to fail to consider how any changes might impact on particular groups or learners or people who use services.

The experiences and perceptions of nurses, midwives, nursing associates and students

The Benchmarking Review found numerous studies in the EU comparator countries of Ireland, Spain and Sweden which explore the experiences and perceptions of student nurses and midwives. However, these studies do not establish links between experiences and the requirements of the EU Directive and the studies are small scale. The main findings of those studies point to elevated levels of stress amongst students undertaking clinical placements, as well as a deficit in some areas of competence. Major sources of student stress on clinical placements are unsupportive supervisors, concerns surrounding clinical competence and fears of causing patients harm, along with the confusion at witnessing practices on placement which are incongruent with what they were taught in classes.^{38, 39, 40.}

A key risk cited by nursing stakeholders was that diversion from the EU Directive would result in a perception, amongst stakeholders and the public, that education and training standards had been lowered or diluted, which could in turn damage confidence in the nursing profession. Some stakeholders felt that there was a need to manage how existing registrants perceive any changes and the new graduates produced following any changes.

Midwifery stakeholders also had a concern about the potential harm to the reputation of midwifery domestically and internationally, were it perceived that the UK's education and training standards had been lowered. Concerns also centred around changes to programmes that could impact on the preparedness of recently qualified registrants to deliver services and for the potential for changes to cause disruption or uncertainty in the profession. Others by contrast felt that the student experience stood to benefit should the NMC review and update its pre-registration standards. For example, respondents frequently focused on a shift away from "the numbers" towards achieving outcomes and competencies, which it was felt could potentially improve the quality of learning experiences and improve student's work-life balance.

The number and supply of nurses, midwives, and nursing associates

Many of the nursing respondents and interviewees who addressed this matter in the stakeholder research identified the risk that UK registrants would no longer be able to work in the EU were the UK to diverge from the EU Directive, which would limit their future career options. Some raised the specific concern that diverging from the EU Directive could disrupt the movement of registrants between Northern Ireland and the Republic of Ireland.

Some nursing stakeholders felt that the review of the programme standards was being primarily driven by a need to respond to nursing shortages, particularly in England. Here it was emphasised that the NMC must not make changes which prioritise quantity at the expense of quality in terms of the nursing workforce. Several also had a concern that EU registrants may be put off coming to the UK to practice, exacerbating the effect already seen as a result of Brexit. Others were hopeful that diverging from the EU Directive could help to widen access to nursing, which would help to expand and diversify the nursing workforce.

In terms of midwifery stakeholders, views were mixed. Some felt that this review provided an opportunity to widen access and improve the inclusivity of midwifery programmes and in turn help to increase the size of the midwifery workforce. On the other hand, there was a concern that supply might be harmed if the UK became less able to attract midwife students and registrants from the EU, should the Standards no longer align. A few also voiced a concern that changes might be pursued which prioritised increasing the quantity of midwives at the expense of quality.

Effectiveness, availability, and quality of education programmes

The Evidence and Benchmarking Reviews found few studies on this topic within the inclusion criteria. Evidence identified by the Benchmarking Review tends to be tangential, except one Spanish study which identified that learning activities at one university were falling short of the established quality indicators.⁴¹ One other exception is the article by Henriksen et al. which emphasises that the definition of clinical practice in the EU Directive places restrictions around the replacement of clinical learning hours with simulation.⁴² Another theme in the literature – identified in both the Evidence and Benchmarking Reports – is a theory practice gap and a lack of clinical skills amongst nursing students.^{43,44} Furthermore, the Evidence and Benchmarking reviews has found very limited evidence on the extent to which skills and knowledge are retained by students when they enter practice.

Nursing stakeholders tended to focus on quality and effectiveness of education programmes. Many had a concern that diverging from the EU Directive could lead to a lowering in the quality of education programmes (e.g. were practice hours to be significantly reduced), while a large proportion also felt that making changes posed an opportunity to raise the effectiveness and quality of educational programmes.

Midwifery stakeholders had mixed views. While some felt this was an opportunity to modernise and improve the quality of education programmes drawing on the latest evidence and good practice, other respondents voiced concerns about the potential lowering of pre-registration education standards. Some suggested that the EU Directive provided a minimum “safety net” and felt that the NMC risked trying to “fix something that was not broken”. Some felt that the quality of education programmes could be undermined were for instance programmes to be shortened, simulation was used to substitute practice-based learning, or where “subjective” and “less rigorous” competency assessments were employed over hours- and numbers-based requirements. A few had the view that the NMC should only add and build on the requirements of the EU Directive rather than diverging from it.

9. Further considerations for future work

In the **stakeholder research nursing** stakeholders felt that consistency of standards across the four nations would be important to retain to support the mobility of the workforce. Many were also keen to avoid creating 'bureaucratic' barriers to the movement of registrants between the EU and UK. This was seen as important in the context of supporting the cross-border movement of students and registrants between Northern Ireland and the Republic of Ireland. In Scotland divergence with the EU Directive was seen as a potential challenge in terms of the cross-transfer of registrants and in terms of an independent Scotland's future aspirations to re-join the EU.

Stakeholders were asked about their overall sentiment about potential changes. Though some found it difficult to answer because it is speculative in nature, the results help to identify general levels of optimism/anxiety around making any changes. Up to a fifth of **nursing** survey respondents expected an overall positive impact as a result of potential changes, with greater levels of optimism about the impact on England. Around 1 in 10 expected the impact on each nation to be solely negative; while close to half of respondents across Wales, Scotland and Northern Ireland did not feel able to say whether impact would be positive or negative because it was not clear what changes would be taken forward.

Many **nursing** stakeholders emphasised the importance of consistency of standards across the UK, taking the opportunity to raise and tailor standards to the UK context. Concerns about changes leading to the lowering of standards and to poorer outcomes were common, as was a concern that UK qualifications would not be recognised internationally, which in turn might limit workforce mobility.

Midwifery stakeholders said that it would be important to retain consistency of standards across the four nations and there was again a keenness to avoid creating 'bureaucratic' barriers to the movement of registrants between the EU and UK. They had a particular concern about any real or perceived "dilution" of midwifery standards as a result of divergence from the EU Directive which could harm the strong global reputation of UK midwifery and its ability to influence others.

Slightly higher proportions of **midwifery survey** respondents (compared to nursing) expected a positive impact on the four nations, with England again being the nation that it was felt would most likely experience a positive impact. Respondents saw opportunities to raise and tailor standards to the UK context. Potential risks included lowered standards harming the reputation of UK midwifery and UK midwifery qualifications being less recognised and valued internationally, which could restrict the movement of registrants and less interest in studying in the UK.

Annex: Requirements determined by the EU Directive

General education length and qualifications	
<p>Nursing:</p> <p>Admission for nurses responsible for general care is contingent on either:</p> <ul style="list-style-type: none"> a) completion of general education of 12 years, as attested by a diploma, certificate or other evidence issued by the competent authorities or bodies in a Member State or a certificate attesting success in an examination of an equivalent level and giving access to universities or to higher education institutions of a level recognised as equivalent; or b) completion of general education of at least 10 years, as attested by a diploma, certificate or other evidence issued by the competent authorities or bodies in a Member State or a certificate attesting success in an examination of an equivalent level and giving access to a vocational school or vocational training programme for nursing. 	<p>Midwifery:</p> <p>Admission to training as a midwife shall be contingent upon one of the following conditions:</p> <ul style="list-style-type: none"> a) completion of at least 12 years of general school education or possession of a certificate attesting success in an examination, of an equivalent level, for admission to a midwifery school for route I; b) possession of evidence of formal qualifications as a nurse responsible for general care referred to in point 5.2.2 of Annex V for route II.

Shortened courses	
<p>Nursing</p> <p>EU Directive does not specify rules around shortened courses for nursing</p>	<p>Midwifery</p> <ul style="list-style-type: none"> • Full time education and training of at least two years consisting of 3,600 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care, or • Full-time education and training as a midwife of at least 18 months consisting of at least 3,000 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care and followed by a year's professional practice

RPL	
<p>Nursing</p> <p>RPL for nursing education is permitted, but the Directive does not specify what proportion of a nursing programme can be substituted.</p>	<p>Midwifery</p> <p>RPL is not permitted for pre-registration midwifery programmes</p> <p>However qualified nurses are permitted to enter shortened courses through recognition of formal qualification/s</p>

Knowledge and skills for nursing and midwifery	
<p>Nursing</p> <p>The training leading to the award of a formal qualification of nurses responsible for general care shall consist of the following two parts.</p> <p>A. Theoretical instruction</p> <p>a. Nursing: — Nature and ethics of the profession — General principles of health and nursing — Nursing principles in relation to: — general and specialist medicine — general and specialist surgery — child care and paediatrics — maternity care — mental health and psychiatry — care of the old and geriatrics</p> <p>b. Basic sciences: — Anatomy and physiology — Pathology — Bacteriology, virology and parasitology — Biophysics, biochemistry and radiology — Dietetics — Hygiene: — preventive medicine — health education — Pharmacology</p> <p>c. Social sciences: — Sociology — Psychology — Principles of administration — Principles of teaching — Social and health legislation — Legal aspects of nursing</p> <p>B. Clinical instruction — Nursing in relation to: — general and specialist medicine — general and specialist surgery — child care and paediatrics — maternity care — mental health and psychiatry — care of the old and geriatrics — home nursing One or more of these subjects may be taught in the context of the other disciplines or in conjunction therewith. The theoretical instruction must be weighted and coordinated with the clinical instruction in such a way that the knowledge and skills referred to in</p>	<p>Midwifery</p> <p>The training programme for obtaining evidence of formal qualifications in midwifery consists of the following two parts:</p> <p>A. Theoretical and technical instruction</p> <p>a. General subjects — Basic anatomy and physiology — Basic pathology — Basic bacteriology, virology and parasitology — Basic biophysics, biochemistry and radiology — Paediatrics, with particular reference to new-born infants — Hygiene, health education, preventive medicine, early diagnosis of diseases — Nutrition and dietetics, with particular reference to women, new-born and young babies — Basic sociology and socio-medical questions — Basic pharmacology — Psychology — Principles and methods of teaching — Health and social legislation and health organisation — Professional ethics and professional legislation — Sex education and family planning — Legal protection of mother and infant</p> <p>b. Subjects specific to the activities of midwives — Anatomy and physiology — Embryology and development of the foetus — Pregnancy, childbirth and puerperium — Gynaecological and obstetrical pathology — Preparation for childbirth and parenthood, including psychological aspects — Preparation for delivery (including knowledge and use of technical equipment in obstetrics) — Analgesia, anaesthesia and resuscitation — Physiology and pathology of the new-born infant — Care and</p>

<p>this Annex can be acquired in an adequate fashion.</p>	<p>supervision of the new-born infant — Psychological and social factors</p> <p>B. Practical and clinical training This training is to be dispensed under appropriate supervision:</p> <p>— Advising of pregnant women, involving at least 100 pre-natal examinations. — Supervision and care of at least 40 pregnant women. — Conduct by the student of at least 40 deliveries; where this number cannot be reached owing to the lack of available women in labour, it may be reduced to a minimum of 30, provided that the student assists with 20 further deliveries. — Active participation with breech deliveries. Where this is not possible because of lack of breech deliveries, practice may be in a simulated situation. — Performance of episiotomy and initiation into suturing. Initiation shall include theoretical instruction and clinical practice. The practice of suturing includes suturing of the wound following an episiotomy and a simple perineal laceration. This may be in a simulated situation if absolutely necessary. — Supervision and care of 40 women at risk in pregnancy, or labour or postnatal period. — Supervision and care (including examination) of at least 100 post-natal women and healthy new-born infants. — Observation and care of the new-born requiring special care, including those born pre-term, post-term, underweight or ill. — Care of women with pathological conditions in the fields of gynaecology and obstetrics. — Initiation into care in the field of medicine and surgery. Initiation shall include theoretical instruction and clinical practice.</p>
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<p style="text-align: center;">Use of simulation</p>	
<p>Nursing</p> <p>Simulation specifically for nursing is not mentioned.</p> <p>Restrictions are placed on the use of simulation in nursing education because of the way the Directive defines clinical practice as ‘in direct contact with a healthy or sick individual.’</p>	<p>Midwifery</p> <p>Where active participation is not possible because of a lack of breech deliveries, practice may be in a simulated situation.</p> <p>Performance of episiotomy and initiation into suturing... may be in a simulated situation if absolutely necessary.</p>

Programme length and number of hours

Nursing	Midwifery
<p>For nurses responsible for general care: at least three years of study consisting of at least 4,600 hours of theoretical and clinical training.</p> <p>Theoretical training should represent at least a third and clinical training at least one half of the minimum duration of training.</p> <p>Practice hours shall constitute at least 2,300 hours (of a three-year 4,600-hour programme)</p>	<p>One of the following criteria must be satisfied:</p> <ul style="list-style-type: none"> • (full-time training of at least three years as a midwife, which may in addition be expressed with the equivalent ECTS credits, consisting of at least 4 600 hours of theoretical and practical training, with at least one third of the minimum duration representing clinical training; • full-time training as a midwife of at least two years, which may in addition be expressed with the equivalent ECTS credits, consisting of at least 3 600 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care referred to in point 5.2.2 of Annex V; • full-time training as a midwife of at least 18 months, which may in addition be expressed with the equivalent ECTS credits, consisting of at least 3 000 hours, contingent upon possession of evidence of formal qualifications as a nurse responsible for general care referred to in point 5.2.2 of Annex V, and followed by one year's professional practice for which a certificate has been issued in accordance with paragraph 2 <p>Practice hours shall constitute 50% of a three-year programme.</p>

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