Perspectives on nursing education within the Swedish higher education system

Thematic evaluation of nursing education

Index

Introduction

The following report is a translated excerpt from the original report *Bedömargruppens yttrande över utbildning som leder til sjuksköterskeexamen – tematisk utvärdering 411-00253-21* (in Swedish).

Reading instructions

The following report contains a methods section, including:

- a description of one of the four components within the national system for quality assurance of higher education and research, operated by The Swedish Higher Education Authority (UKÄ): thematic evaluations (p. 4)

- the specific methods for the thematic evaluation of nursing education within the Swedish higher education system (p. 5-8)

The report also contains:

- results of the thematic evaluation of nursing education within the Swedish higher education system, on a national level (p. 9-34)

- summary reflections of the results on a national level (p. 34-36)

Thematic evaluations

Thematic evaluations are one of four components within the national system for quality assurance of higher education and research, operated by The Swedish Higher Education Authority (UKÄ). Thematic evaluations are presented in the report 2016:15: *Nationellt system för kvalitetssäkring av högre utbildning – redovisning av ett regeringsuppdrag* (in Swedish). Its' purpose is to provide a better understanding and national comparisons of how various higher education institutions (HEIs) work and of achieved results in the examined theme. The aim of thematic evaluations is to contribute to important knowledge and national comparisons of how HEIs operate and which results that have been achieved within a specific area of interest. Thematic evaluations have a developmental focus and does not lead to any sanctions against HEIs.

The methodology applied to the thematic evaluations is developed and adapted to the relevant theme. UKÄ will notify HEIs about the relevant methodology well ahead of beginning a thematic evaluation.

Thematic evaluation of programmes leading to a nursing degree

In the thematic evaluation of programmes leading to a nursing degree, the Swedish Higher Education Authority (UKÄ) examined how higher education institutions (HEIs) work to ensure that students achieve selected qualitative targets related to degree outcomes on the learning level competence and skills.

A further aim was to identify strengths and areas for improvement, to provide an opportunity for HEIs to evaluate their work and exchange experiences, and to gain knowledge about the results achieved.

Methods developed through dialogue

The thematic evaluation started with a multi-step method development process involving different stakeholder groups. The evaluation has built on:

- Previous evaluation results by UKÄ

- Research and report results

- Knowledge and experience gained through meetings and dialogues with - among others - the advisory group and representatives from the HEIs that provide education leading to a nursing degree

The advisory group consisted of representatives from HEIs, the health care system, the Swedish Nursing Association, the Swedish Association of Health Professionals, the National Board of Health and Welfare and the Swedish Association of Local Authorities and Regions.

Meetings with the advisory group and with the HEIs produced extensive material addressing the challenges that the HEIs needed to work on further, linked to competence and skills. The feedback and material gathered from these meetings has been central to the design of the evaluation.

Design of the evaluation

The evaluation was conducted in the form of a thematic evaluation, which means that UKÄ adapted the design of the evaluation to the theme in question. Two assessment areas were included in the evaluation: Preconditions and Design, implementation and outcomes.

The evaluation questions answered by the HEIs in the evaluation are as follows:

<div>

Evaluation questions

1a. How does the HEI work to create good conditions for students to achieve competence and skills by ensuring there is an adequate supply of teachers?

1b. How does the HEI work to create good conditions for students to achieve competence and skills by ensuring there is supervisor training for supervisors in clinical practice?

1c. How does the HEI work to create good conditions for students to achieve competence and skills by ensuring there is adequate availability of clinical placements?

2. How does the HEI work to design and implement the nursing programme so that students can demonstrate their competence and skills in identifying care needs, establishing care plans and providing care and treatment, both independently and in collaboration with the patient and family members?

3. How does the HEI work to design and implement the nursing programme so that students can demonstrate the ability to work in teams and in collaboration with other professional groups?

4. What changes in the design and implementation of the clinical component of the programme do you think/would you like to see remain after the coronavirus pandemic?

</div>

Question 4 was formulated based on the assignment given to UKÄ by the Government to follow up what consequences decisions and actions taken by the HEIs in response to the coronavirus pandemic have had for higher education activities. The assessment panel has not submitted any graded recommendations to the HEIs in relation to question 4. The results of question 4 are instead included in UKÄ's final report on the government assignment regarding the consequences of the coronavirus pandemic for HEIs: *Rapport 2022:18. Coronapandemins konsekvenser för universitet och högskolor – slutredovisning av ett regeringsuppdrag* (in Swedish). The assessment panel's reflections (see below) also summarise the results of question 4.

Relevant results for questions 1a–4 are in addition reported to the coordinator for the government assignment *Samordnat arbete för fler platser för verksamhetsförlagd utbildning i sjuksköterskeutbildningen* [Coordination for an expansion of the number of clinical placements in nursing education].

Stages of the thematic evaluation

The different stages of the thematic evaluation will be described below.

Kick-off meeting

At the initial kick-off meeting, which was conducted on-line via Zoom, UKÄ presented the purpose and approach of the evaluation. UKÄ invited representatives from each HEI, student unions and representatives from the assessment panel. The process of the thematic evaluation, a description of the methodological work, questions and answers about the evaluation and other material was available on the UKÄ website.

Four weeks after the kick-off, the HEIs sent UKÄ documentation – a background description – in advance of the assessment meeting. The background description contained information on the HEI's nursing degree programmes and the number of students admitted during the last year. The HEIs also attached their respective programme syllabuses with information on the courses of the programme and the number of credits, broken down by semester. Information on teacher resources was provided in a template.

UKÄ produced information in the form of statistics broken down by programme and at the national level on e.g. the number of entrants. the number of graduates, the number of applicants and student completion. The information was shared with the HEIs and the assessment panel.

Assessment meeting

UKÄ invited representatives to the assessment meeting from each HEI's nursing programme from the following categories: management, programme coordinators, students, and regional and municipal healthcare providers. During the assessment meeting, the representatives assessed the programme based on the evaluation questions and documented the assessment in bullet form in the self-evaluation form. The assessment meeting was organised for four to five HEIs at the same time with a maximum of three participants per category.

Self-evaluation and report

Each HEI submitted its self-evaluation five weeks after the assessment meeting. The assessors evaluated each programme in a brief report in the form of recommendations graded based on what the HEI should and/or could develop further. The recommendations in the report were based on the self-evaluation, which is appended to the report. The assessors also summarised the national situation regarding how HEIs work with

competence and skills in nursing programmes, and what strengths and areas for improvement exist.

Decision

UKÄ decided on the graded recommendations of the assessors.

National on-line seminar

On December 9 2022 a two-hour on-line seminar was held o the theme: *The thematic evaluation of nursing education – reflections of the assessment panel.* The project leader of the evaluation as well as the chair and one of the two deputy chairs of the assessment panel presented at the seminar. Approximately 300 people had signed up as participants for the seminar and they were also able to post questions to the panellists.

Follow-up

All HEIs are to submit an action report on how they addressed the graded recommendations by 1 November 2023. The HEIs must state how t"should" recommendations have been handled, but are welcome to also indicate how they worked further with both types of graded recommendations to ensure the best possible quality development. The assessors will then decide on actions and compile the results.

The recommendations are not mandatory, i.e. degree-awarding powers cannot be revoked in the follow-up. The follow-up concludes with a reunion of the HEIs for knowledge exchange. The aim of the follow-up is to provide feedback that is developmental for improvements at individual HEIs and to highlight needs at the national level.

Results at a national level – reflections of the assessment panel

Background

There is a growing need for nurses with a high competence level in a wide range of areas. This has been recognised by the World Health Organization (WHO) in its report *State of the world's nursing 2020: investing in education, jobs and leadership* as well as in the official government report *SOU 2021:52 Vilja välja vård och omsorg – En hållbar kompetensförsörjning inom vård och omsorg om äldre* [Willingness to choose health and social care – Sustainable competence provision in health and social care for the elderly]. To meet the challenges of the future, this places increased demands on the quality and innovation of nursing programmes.

Swedish healthcare is facing major changes with an increasing amount of care and rehabilitation taking place in the home and with only highly specialised care in hospitals, which the OECD also highlights in its 2017 report *Health at a glance*. The main focus of healthcare has long been urgent and emergency care, but a shift to more health promotion and prevention is now taking place. Today's population is demanding more person-centred care and joint decision-making between patients and providers. Knowledge that offers promising opportunities to improve patient care, safety and outcomes is also being built up over time. These trends have been highlighted in the 2018 report *Från mottagare till medskapare. Ett kunskapsunderlag för en mer personcentrerad hälso- och sjukvård* [From receiver to co-creator. A knowledge base for more person-centred healthcare] from the Swedish Agency for Health and Care Services Analysis. The trends also create a need for nurses who can work in an evidence-based and person-centred way in line with the National Board of Health and Welfare's model for evidence-based practice.

The Swedish Agency for Public Management's 2021 report *Vision e-hälsa 2025 – ett försök att styra genom samverkan* [Vision e-health 2025 – an attempt to steer through collaboration] show that there is a rapid digitalisation in the healthcare sector in terms of both provision and working methods. Nurses need to be able to use technology in their interactions with patients and their relatives and in collaboration with colleagues. Digital technology is needed to collect and analyse patient and operational data. The development of new technologies in healthcare has a direct impact on nursing, the nursing profession and nursing

education. Nurses are key players in introducing and using technology in practice. The ability to understand and use technology is becoming an increasingly important part of nurses' competence.

Teamwork and collaboration are essential skills for all healthcare professionals, including nurses. Good teamwork is crucial to the quality of healthcare and patient safety. Teamwork and collaboration is also one of the six core competencies of nursing: healthcare workers must be able to work together and complement each other in patient care.

Healthcare needs in Sweden will continue to grow and increase in complexity; the population is getting older and more heterogeneous. Sweden has chosen to link the implementation of the UN 2030 Agenda and the Sustainable Development Goals to public health policy, as well described in the 2020 report from the Public Health Agency of Sweden *På väg mot en god och jämlik hälsa – Stödstruktur för det statliga folkhälsoarbetet* [Towards good and equitable health – Support structure for national public health work]. The overarching goal is to create the conditions in society for good and equitable health across the entire population and to reduce the preventable health inequalities that exist. Compared globally, public health in Sweden is of high quality and health is developing positively for large groups of the population. However, there are still differences that need to be addressed: in health, lifestyle and living conditions between women and men and between socioeconomic groups and vulnerable groups.

In parallel with the challenges of healthcare, there is a high turnover of healthcare workers, and a common challenge today is staff retention. There will also be a shortage of newly qualified nurses by 2035. The retirement of registered nurses is expected to be relatively modest, with just under a third currently aged 50 or over. A proportion of registered nurses are expected to gain further qualifications, mainly to become specialist nurses.

The nursing programmes in the country need to train nurses who are prepared to face the changes of the future and who have the skills to work in a new healthcare landscape, with more care and rehabilitation in the home and a greater use of digital technology. In addition, the profession needs to be strengthened by creating conditions in education for a sustainable working life and for readiness to face change.

The nursing degree is 180 credits and is a professional qualification at the first-cycle level. Twenty-five HEIs are authorised to award nursing degrees, and all of them also offer a nursing programme. This means that there is at least one HEI in each region offering a nursing programme. In the 2019/20 academic year, more than 4,500 nursing degrees were awarded. In spring 2021, nearly 16,000 students were enrolled in a nursing programme. Nursing education includes clinical training in healthcare facilities, referred to as clinical placement. Clinical training is

an essential part of the programme, enabling students to put their theoretical knowledge into practice. Today, there are challenges in providing clinical placements in nursing education due to a lack of experienced nurses as supervisors and a decrease in inpatient care places. This requires other facilities to accept the students.

UKÄ's thematic evaluation of education leading to the nursing degree focused on competence and skills, and specifically on the qualitative targets to "demonstrate the ability to identify care needs, establish a care plan and provide care and treatment, both independently and in collaboration with the patient and relatives" and to "demonstrate the ability to work in teams and in collaboration with other professional groups". The evaluation also focused on how HEIs contribute to students' ability to achieve the qualitative targets by ensuring the proper conditions are in place, such as competence provision, clinical placements and supervision during clinical placements.

During the same period as the thematic evaluation was carried out, the Government appointed the inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education] (SOU 2022:35), which also partly focused on the conditions for clinical placements. The assessment panel finds it very positive that both the inquiry and UKÄ's thematic evaluation analysed conditions, structure and qualitative targets for nursing education. The HEIs will be able to use the results as a basis for quality development in the coming years.

Preconditions for nursing education

Competence provision and professional development

Competence provision – common challenges and proposed solutions

Competence provision in the country's nursing programmes is a common challenge for several HEIs. Some HEIs are undergoing a generational shift in staff, which also poses challenges. In this context, the assessment panel would like to point out that competence provision is not only a matter of the number of teachers, but also of the content and quality of the programmes.

The self-evaluations show that several of the HEIs are having difficulties recruiting staff, especially senior lecturers and professors. The assessment panel also noted that few associate professors and professors

are involved in undergraduate teaching in most programmes. With few senior teachers, there is a risk of the academic anchoring of the programme being inadequate. At the same time, several good examples and suggestions for solutions were put forward at the thematic evaluation's assessment meetings, such as:

Good examples regarding competence provision and professional development

Maintaining academic competence through joint doctoral positions for HEIs and clinics

Greater collaboration with other HEIs on senior teacher supply

Focusing on having career conversations with doctoral students to inspire them to pursue a future career in academia.

The evaluation has also shown that there are some existing difficulties for HEIs in recruiting teachers with up-to-date clinical and specialist nursing competence. As healthcare is constantly evolving and changing, teaching skills in nursing education need to be both clinically grounded and professionally grounded. At the same time, HEIs have also shared good examples and proposed solutions. One example is the part-time employment of teachers at a clinical training centre.

The self-evaluations show that many HEIs are working on a competence provision plan. Despite this, there are cases where there is no competence provision plan, including link to the strategic competence provision plan at the HEI. The assessment panel finds it important that there is a clear competence provision plan in place, which also includes a discussion of priorities for resource allocation and recruitment needs. This is especially true for nursing programmes that are located within larger departments and faculties with several different health sciences programmes. It is important that the management of nursing education is part of a joint operational planning process at the HEI, and that the education management and the faculty or departmental management continuously discuss competence needs and provision in relation to the needs and profile of the programme. Developing profile areas in nursing education could be one of the solutions to the competence dilemma; a profile area can provide support in marketing for new recruitment and also help to identify the need for specific competence.

The number of graduates and the quality of education at the country's nursing programmes affect the competence provision of nurses nationally. The assessment panel therefore considers it important to reinforce the work currently being done on competence provision in

healthcare. This applies within both the regional health competence councils and the National Health Competence Council. If the HEIs are unable to provide nursing education of sufficient quality, the competence provision for the healthcare sector may be in jeopardy.

Qualifications and professional development for old and new colleagues

Competence provision is not only a matter of attracting and recruiting new staff, but also of retaining existing teachers and developing their skills. In this context, the assessment panel would like to highlight success factors for retaining staff, such as professional development time for conducting research or pedagogical development work. It may also involve reviewing the scope and content of time set aside for professional development.

Staff research and pedagogical skills development must be aligned with the needs of the healthcare facility and the individual, and must be included in workforce planning. The self-evaluations provide good examples of internal activities at HEIs that enhance teachers' competence. For example:

Good examples regarding qualifications and professional development

"Excellence groups", where teachers with expertise and interest in a particular area come together in groups, further develop the area, and disseminate knowledge within the teaching faculty

Mixing competencies, such as lecturers, senior lecturers and professors, in the courses

Annual internal pedagogical conferences

The assessment panel emphasises that pedagogical competence is as important as academic competence. Most HEIs require teacher training for higher education within 2 years of employment, which the assessment panel considers to be very important. However, the assessment panel would like to emphasise that the pedagogical competence of the teachers needs to be monitored and evaluated on an ongoing basis. It is also important that teachers have the opportunity to regularly enhance their pedagogical competence and that the pedagogical qualification pathway is as clear as the academic one.

Some HEIs also describe a good example of successful teacher recruitment:

> **Good example regarding qualifications and professional development**
>
> Internally focusing on doctoral studies for teachers/lecturers already employed by the HEI

The assessment panel believes that in the long term it is also important to highlight career opportunities available to students as graduates and researchers, in order to attract potential doctoral students to the HEI. Career planning is particularly important for new hires in order to strengthen their skills, as well as to retain them in the future.

Collaboration and sharing of expertise between departments and higher education institutions

Several HEIs highlight the need to collaborate on expertise. This could serve as a success factor as many HEIs compete for doctoral-level teachers and various specialist competencies. Some HEIs are already working on exchanging expertise with each other and have found models that work. The assessment panel suggests that the HEI collaboration arenas that have already been established – HEIs South, East, North – could be a platform for sharing competence needs and developing collaboration models. In addition to collaborating on competence, collaboration could also relate to courses and educational materials, such as lectures, to make more efficient use of resources and increase the quality of education. The assessment panel also wants to underscore that collaboration can take place within the HEI itself, as different competencies are available in different departments or subjects.

Several HEIs find that collaboration with the administrative unit within their own HEI is particularly important for the allocation of resources. Teachers often perceive administration as burdensome and an obstacle to teaching and job satisfaction. In this regard, the assessment panel believes that teachers need to work with the organisation to identify how administrative support could be expanded for the benefit of nursing education.

Several of the self-evaluations describe a need for new skillsets, such as skills related to healthcare's transition to the national goal of Excellent and local care. The assessment panel believes that collaboration between HEIs and the healthcare sector will be particularly important here to identify specific skills needed for the transition. The assessment panel also suggests that the regional health competence councils and the National Health Competence Council should propose a model for collaboration between HEIs as well as between HEIs and healthcare facilities within the regions.

Combined employments between HEIs and healthcare facilities for competence assurance

Most HEIs describe that they are working on developing combined employments for teachers at the HEI and in clinical practice. They emphasise that this is crucial to raise clinical competence and to ensure competence needs are met at the HEIs in the future as well. They also stress the importance of ensuring the availability of academically qualified nurses in the healthcare sector in order to provide healthcare that is evidence-based and safe for patients.

However, it seems that the development of combined employments is associated with certain challenges. Traditionally, models have been created where teachers are employed both in the HEI and in the healthcare facility, or models where the HEI and the healthcare facility have shared the cost.

However, the assessment panel believes that new ways of working with combined employments are needed to make them sustainable. Some HEIs work with all teachers having at least 20 percent clinical service. At other HEIs, the combined employments are paid by the HEI, and the clinic is invoiced for the part of the employment carried out there. The assessment panel would like to point out that there is a need for greater flexibility.

One suggestion from the assessment panel is that there could be combined employments at different levels – not just for senior lecturers or professors, but also for lecturers with a combination of teaching and clinical service. Professional development could also be included in the combined employments, such as doctoral studies for academic qualification for teachers with lecturer appointment. It would then be possible for both the HEI and the healthcare sector to fund doctoral studies for individuals working in both organisations. Unfortunately, there are too few models for the combined employment that have been evaluated in the long term and where there is clear synergy. The assessment panel finds that the regional health competence councils and the National Health Competence Council could be tasked with evaluating existing models and developing proposals for combined employments in HEIs and clinical practice for nurses.

As up-to-date clinical competence is in short supply for many of the HEIs, combined employments between HEIs and clinical practice may be an option. For those HEIs that have adjunct clinical lecturers (ACL) in their clinical placement organisation, the assessment panel suggests that the HEI, in collaboration with the healthcare facility, reviews whether the number of ACLs is sufficient and whether they can teach in areas other than clinical placement. Like other employments, the ACL employment needs to be monitored and evaluated in relation to short and long-term competence provision. Here, the assessment panel finds that

ACL employments could be more clearly regulated in clinical placement agreements.

In order to attract more people to see teaching as a career path for nurses, the combined employments could become role models in both academia and the healthcare sector. In this respect, the assessment panel would like to highlight the importance of making students aware of opportunities in the profession and of them being exposed to instruction led by teachers with combined employments.

Supervisor training

Different models of supervisor training

Supervisor training for healthcare workers who supervise students during clinical placement is crucial for the quality assurance of the education. This is the view of both the HEIs and the healthcare facilities. All HEIs indicate that they offer some form of credit-bearing supervisor training, ranging from 7.5 to 15 credits. Most HEIs offer a 7.5-credit university course at the first-cycle level, while others offer two 7.5-credit courses, one at the first-cycle level and one at the second-cycle level. Some HEIs only offer supervisor training at the second-cycle level, but the assessment panel finds that this approach risks excluding supervisors who are not qualified at the second-cycle level from the training.

The self-evaluations show that supervisor training is sometimes open to different healthcare professions and also to both teachers and clinicians. The assessment panel finds that in such cases it may be important to link the supervisor training to the respective nursing programme. Supervisors need to have specific knowledge of the intended learning outcomes of the nursing programme, and be able to build on and translate them into the concrete supervision situation. The assessment panel also believes that there is a qualitative benefit to supervisor training including knowledge on common supervision models such as peer learning, which several HEIs use. At the same time, it is important that both supervisors and students have a common understanding of a supervision model in order for it to work in practice during a clinical placement.

Most of the HEIs state in their self-evaluations that supervisors in clinical practice are encouraged to complete supervisor training, but at the same time state that there are challenges with both a low number of applicants and declining completion rate. This is partly a result of the high turnover of healthcare workers in the healthcare sector and the fact that there is not always enough time for healthcare workers to devote to supervisor training and supervision.

The assessment panel therefore finds a supervisor training requirement in order to be eligible to supervise nursing programme students must be clearly regulated in clinical placement agreements. It would also be beneficial to link supervisor competence with career ladders for nurses within the healthcare facility in order to encourage more nurses to become supervisors and complete the supervisor training.

Mapping, definition and evaluation of supervisor training

The self-evaluations show that there is a need to map the needs for supervisor training and the supervisor training programmes offered at the country's HEIs, in terms of both content and scope. In order to ensure the quality of supervisor training, there is a need to identify areas for improvement as a basis for developing a national basic and common supervisor training programme. The assessment panel therefore suggests that existing needs and the training offered nationally be mapped out as part of the National Health Competence Council's ongoing work to develop a national supervisor training programme. At present, there is no national, common definition of what supervisor training is and should contain. If supervisor training is to be conducted in a small number of places in the country to achieve a more common and standardised training with increased quality and more efficient allocation of resources, the assessment panel finds that the proposal needs to be investigated. The assessment panel finds that the National Health Competence Council can coordinate this work as well.

The assessment panel finds that supervisor training needs to be continuously evaluated locally, in terms of needs, form, content and marketing. The evaluation needs to be carried out in collaboration between the HEI and the healthcare facility and should address students, supervisors, managers and the teachers involved in the training. The assessment panel also finds that the HEI and healthcare facility needs to include supervisor competence in the staff professional development plan, both for teachers employed and the nurses who supervise the students. If those supervising students lack supervisor training, the HEI needs to work with the healthcare facilities to draw up an action plan to ensure that supervisors have adequate supervisor training. The assessment panel would like to emphasise that there is a joint responsibility for supervisor training between the HEI and the healthcare facility, which must be clearly regulated in the clinical placement agreement. This should also specify the form in which dialogue and collaboration can take place. Students also need to be included in dialogues on supervisor training. Several HEIs have stated that they need to develop communication and various collaboration forums to be able to conduct a good dialogue with the healthcare facilities – specifically with the operations managers – about supervisor training. This concerns the purpose, content and importance of nurses who are also supervisors participating in the training.

During the assessment meetings of the evaluation, both HEIs and students expressed that there is a need to create a stronger bridge between the clinical placement supervisors and the HEI and nursing programme teachers in order to achieve a higher quality in the supervision of students. A good example of this is the following:

Good examples regarding supervisor training

An organisation of regular digital meetings, for example to achieve a better consensus on intended learning outcomes and progression.

Flexible, collaborative supervisor training

Several HEIs describe that they offer different forms of supervisor training in an attempt to find solutions to increase both the number of applicants and student completion.

Many HEIs also describe that they have developed the training together with the healthcare facility and that they are working towards more flexible training in terms of content, structure and pedagogy. The supervisor training is sometimes provided only remotely or in combination with traditional campus-based instruction. This has led to positive effects for student completion: more supervisors can come from clinical practice to participate in the training. Some HEIs have also developed the supervisor training in different course components or modules, where participants can structure their supervisor training based on their individual circumstances and needs.

Some nursing programmes indicate that they have instruction on supervision incorporated into their first-cycle programme. Many also have peer-supported teaching, e.g. in the form of the peer learning supervision model, or students who are further along in their programme teach and supervise students at the beginning of their programme. The HEIs state that this ultimately leads to competence in supervision. The assessment panel finds that such arrangements are interesting, but they also need to be evaluated to ensure they lead to the anticipated benefits. However, they cannot replace the need for supervisor training after the first-cycle programme.

The self-evaluations highlight the need for greater collaboration on supervisor training between HEIs. The assessment panel therefore suggests that collaboration on supervisor training between HEIs could take place through the HEIs South, East, North collaboration platform.

Clinical placements

Collaboration and student involvement for better quality in clinical placements

The structural changes taking place in the healthcare sector also affect the country's nursing programmes. The self-evaluations identify future challenges to securing the necessary number of clinical placements. HEIs point to risks that the number of clinical placements will decrease when only highly specialised care is to be provided in hospitals, and when care, nursing and rehabilitation is to be provided in the patient's home in the form of local care.

The evaluation therefore points to the need for increased collaboration with the healthcare facilities to identify new types of clinical placements, beyond hospital placements, to ensure the availability of the necessary number of clinical placements based on the number of programme spots for students. For example, the evaluation has shown that there have been instances where students have been left to take responsibility for seeking clinical placements themselves, which the assessment panel finds undesirable.

The self-evaluations show that the process of arranging clinical placements differs between HEIs. The assessment panel therefore finds that each HEI needs to work with the healthcare facility to develop an action plan for how to ensure that the number of clinical placements needed is available. If the HEI is not able to organise a sufficient number of clinical placements, this could have major consequences in terms of a reduction in the number of programme places for the HEI. Over time, this could also impact competence provision in the healthcare sector. The assessment panel therefore wishes to underscore that the consequences of a reduced supply of clinical placements must be documented and addressed in collaboration between the HEIs and the healthcare facilities. The number of clinical placements also needs to be regulated at the local, regional and national level. The self-evaluations also show that collaboration should be based on a common agenda with clear objectives, and that people with a mandate should be involved in the process so that decisions can be made on key strategic initiatives to ensure a sufficient number of clinical placements. A good example that emerged from the assessment meetings on securing clinical placements was the following:

Good example regarding clinical placements

Collaboration between HEIs in a geographical area to jointly secure clinical placements for all students

The evaluation found that the cooperation agreements between the HEI and the healthcare facilities are important documents for securing the number of clinical placements needed, as well as for specifying the quality criteria for a placement, including pedagogical quality. The assessment panel finds that the processes need to be developed, so that the agreements can be introduced and used as policy documents to secure the needed number of clinical placements and ensure the quality of the education. Good examples that emerged from the self-evaluations and assessment meetings were the following:

Good examples regarding clinical placements

Development of joint meeting forums between the HEIs and the supervisors and healthcare facility representatives in clinical practice – sharing information on agreements and their content

One single agreement with municipalities for clinical placements instead of several different ones

A new care context for clinical placements places new demands on the skills and abilities of students, such as digital skills to be able to provide nursing care in the patient's home. The assessment panel therefore finds that the programme's steering documents – linked to the programme's objectives, learning activities and assessment materials – need to be developed and discussed in collaboration. This needs to be done in consultation between the healthcare facility representatives and students, supervisors and individuals with combined employments. Several HEIs' self-evaluations indicate that there are currently challenges in communicating the programme objectives and content to healthcare facility representatives, as the collaboration has shortcomings in terms of distribution of responsibility and quality criteria for clinical placements. The assessment panel therefore finds that the HEIs have an important responsibility to establish a dialogue on these issues. One suggestion for collaboration from the assessment meetings of the evaluation was the following:

> **Good example regarding clinical placements**
>
> Introducing a joint learning platform for the students, the HEIs and the healthcare facilities during the clinical placement, in order to share documents and monitor the learning process

During the evaluation, it emerged that students want to be more involved in discussions about and development of clinical placements. They also want evaluations of clinical placements that take their experiences into account. According to the self-evaluations, the HEIs want supervisors and healthcare facility representatives to have the opportunity to provide feedback on issues related to clinical placements. When quality deficiencies are identified, there should also be an action plan and a structure for communicating the results to the healthcare facility so that the HEI can work with the facility to further address the feedback provided as a means of ensuring the quality of the clinical placement.

Flexible supervision models during clinical placements

The evaluation has shown that the structural change in the healthcare system also affects the availability of supervisors during clinical placements. The self-evaluations highlight that supervision models such as peer learning are an opportunity to ensure that students have access to supervisors, since the model means that fewer supervisors are needed per student. The assessment panel finds that HEIs need to work with the healthcare sector to develop supervision models that ensure there is access to supervisors. This is in line with the inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education], which suggests that HEIs need to review and develop flexible supervision models to meet the demand for trained supervisors. The structural change in healthcare may also lead to the need for changes to intended learning outcomes and learning activities, and combined employments may be very beneficial, as these individuals have insight into both the HEI and clinical practice.

Integrating theory and practice to develop a professional approach

In order for students to develop their competence and skills and to develop a professional approach, they need to acquire, apply and integrate theoretical knowledge and practical skills. This means that students need to prepare for the clinical placement, which can sometimes be a challenge for the HEIs, as the evaluation as shown. A good example that emerges from the self-evaluations is that several HEIs provide opportunities for students to engage in practice-integrated learning

together with students from other study programmes. This learning is supported by reflection on situations and encounters with patients and relatives as well as different healthcare professions. In some HEIs, there is a lack of other study programmes, resulting in limited exchange with other healthcare professions. The assessment panel therefore finds that HEIs lacking this opportunity need to develop opportunities within clinical practice for practice-integrated learning.

The evaluation suggests that clinical skills training at HEIs can be an activity that integrates theoretical knowledge with practical skills. In the self-evaluations, the HEIs state that students need to be offered more practice sessions with teachers, as well as opportunities for self-training. The self-evaluations also show that HEIs should ensure students' level of understanding of how theoretical knowledge and practical skills have been integrated. Good examples are the following:

Good examples regarding clinical placements

Students use signed checklists when a learning component has been completed - a certain number of components must be completed before the clinical placement can start

Student-led teaching as a way to increase opportunities for skills training.

The inclusion of professional development and competence is seen as important to reinforce in the programme. The assessment panel suggests that the HEI works with across programmes to develop learning activities that strengthen professional competence.

The nursing process in education

Constructive alignment and the next-of-kin perspective for improved goal attainment

The nursing process is the systematic decision-making model used by nurses to individualise care by specifying the patient's needs, risks and resources. The nursing process therefore requires that students' theoretical knowledge and practical skills are ensured. The self-evaluations show that the HEIs work more or less goal-oriented with constructive linking of intended learning outcomes related to the qualitative target of the nursing process. The intended learning outcomes and activities include the core competencies. The assessment panel finds that the HEIs need to do more to clarify instruction of the nursing

process and nursing diagnosis. In this way, students can strengthen their ability to engage in clinical reasoning – with the perspectives of both the patient and the next-of-kin included. The HEIs also need to work on how the next-of-kin perspective is included in intended learning outcomes, learning activities and how these are assessed, as this is largely absent. At the same time, it is important that theoretical knowledge is integrated with practical skills so that fragmentation does not occur. The evaluation has shown that this type of work could be done jointly between the HEIs.

Clinical skills training and structured learning activities for improved goal attainment

Part of instruction in the nursing process is in the form of clinical skills training, while another part is within clinical practice. However, the assessment panel notes that it has not been determined which structured learning activities are appropriate to be included in the clinical placement, which would need to be clarified to achieve standardised programmes. The evaluation shows that many HEIs prepare students through e.g. case studies, practical exercises at centres of excellence or in laboratory environments with simulation facilities, which works well. The assessment panel would like to point out that these practical exercises should be clearly anchored in the nursing process so that they are not solely training in the actual doing.

Environments with simulation facilities may become important arenas in the future to enable practical exercises related to theoretical knowledge in a safe environment. There is also the potential to conduct simulation exercises in virtual environments. The assessment panel believes that there is a need to clarify how the HEIs work to develop these environments and to ensure the quality of the learning activities. One suggestion from the evaluation's assessment meetings is the following:

Good example regarding the nursing process in education

Linking formative assessments to the relevant degree outcome

It is also important for HEIs to identify how opportunities for collaboration with other HEIs and the clinical facility are working and could work even better.

Collaboration with the clinical facility and other HEIs on intended learning outcomes and learning activities

The evaluation has shown that the nursing process needs to be clarified for supervisors at the clinical placement so that it is clear during assessment interviews. In the self-evaluations, the HEIs describe that

they would like more interaction with the clinical facility to clarify the knowledge and understanding of the nursing process. The assessment panel therefore suggests that the HEIs develop joint and regular seminars or workshops focusing on the main area of nursing, health sciences and the nursing process. The possibility of combined employments becomes particularly important here, as people with these employments can become an important link between the HEI and the clinical placement.

In the self-evaluations, the HEIs indicate that some form of standardised assessment instrument – such as the Assessment of Clinical Education (AssCe) or the BeVut assessment form – is often used to assess competence and skills and ensure goal attainment. However, challenges emerge in linking assessment instruments to the intended learning outcomes. Challenges also exist in communicating with supervisors in clinical practice on how to use the instruments. Some HEIs state that they need to work on developing more assessment criteria for assessed components in courses that focus on competence and skills.

The assessment panel believes that the HEIs need to develop more learning activities with both theoretical knowledge and practical skills to ensure the students achieve the intended competence and skills. In their self-evaluations, the HEIs also point out that the assessment criteria must be known to both the students and the supervisors in order to be deemed legally compliant. In semester six, most HEIs conduct a national clinical final examination for the nursing degree, to ensure that students achieve the clinical competence required of a newly qualified nurse. This is in line with the inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education], which suggests that the nursing programme ideally would end with a national clinical final examination.

In their self-evaluations, several HEIs state that key elements of the nursing process need to be more clearly linked to the intended learning outcomes, such as participation, shared decision-making and support for self-care. The assessment panel would therefore like to point out that this means that intended learning outcomes may need to be clarified and learning activities developed. It is also important that there is a progression of learning throughout the nursing programme. The description of the core competencies included in the teaching shows that learning activities that include the nursing process are not based on a person-centred approach, but rather describe processes in which the patient is a passive recipient of care.

The assessment panel finds that the structural change in healthcare needs to be reflected more in the teaching of the nursing process. Intended learning outcomes and learning activities need to include e.g. welfare technology and e-health, as much of the healthcare of the future will be conducted remotely with the support of welfare technology. Several

HEIs state that teaching of the core competencies includes digitalisation, but with a great focus on documentation and information. In line with the inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education], the assessment panel suggests that students' knowledge of e-health and digitalisation must be strengthened in the programme. Experiences from the coronavirus pandemic have given HEIs knowledge and experience in working more in virtual environments, which could be further applied to give students experience of working remotely using different technologies and provide more opportunities for learning. Forms of this could include recorded lectures, digital patient cases and simulation exercises. The assessment panel therefore believes that HEIs need to plan for the development of virtual environments that can enhance students' digital literacy in the face of changing healthcare.

Learning interprofessional teamwork

The logistics of interprofessional learning are a challenge

Most HEIs have indicated they have some form of interprofessional learning in their programme, which they sometimes call teamwork. The larger universities are well equipped nto collaborate with other professional education and training programmes to ensure that objectives are met. There are good examples of cross-curricular practice-integrated learning teams in larger HEIs. However, those HEIs with multiple professional education and training programmes express that it is a challenge to make this work in practice due to logistics problems between different programmes. HEIs with multiple campuses also express that it is a challenge to give students the same conditions for interprofessional learning. They argue that it is often easier to achieve quality interprofessional learning on campuses that are located near large hospitals.

The HEIs that do not have other professional education and training programmes state that it is a challenge to provide any interprofessional learning whatsoever. At the same time, the HEIs state that their students work with other professions during the clinical placement, but that this component could be developed. They argue that team collaboration with other professions in the clinical placement is taken for granted and may not always be followed up on in the form of systematic activities and examinations, something that the assessment panel finds important to work on further.

Learning activities to strengthen interprofessional learning

The assessment panel finds that the HEIs need to develop learning activities for interprofessional learning, both during the clinical placement and in other courses. This is because the students are expected to be able to demonstrate competence and skills in teamwork and collaboration with other professional groups.

During the assessment meetings in the thematic evaluation, it was discussed that interprofessional teamwork needs to be practised in other contexts than just during the clinical placement. To increase patient safety, more exercises and activities are needed that require problematisation of teamwork that takes place in clinical practice. A good example from the self-evaluations was the use of a logbook, where students can systematically reflect on teamwork during the clinical placement.

During the assessment meetings of the evaluation, it was also discussed that the HEIs need to be more active in developing more learning activities during the clinical placement and in theoretical elements. These activities could be designed so that students have to solve tasks together with individuals from other professions and describe and reflect on these elements. The learning activities need to be continuous throughout the programme and systematically followed up on. A good example was the following:

> **Good example regarding learning interprofessional teamwork**
>
> Using activity cards during the clinical placement, where the qualitative target is analysed and problematised.

There are examples of HEIs that have posted their activity cards on their website, allowing students to prepare for learning about interprofessional teamwork and what it means for the care and health of patients.

Interprofessional teamwork enhances quality of care

Many HEIs have introduced the concept of interprofessional teamwork into their programme syllabuses and course syllabuses. The Governmental inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education] highlights the importance of students' competence in interprofessional teamwork. The inquiry instructs the HEIs to reword the qualitative target on teamwork to "demonstrate the ability to work in interprofessional teams in healthcare and collaborate with professional groups in other parts of society". This target description has already been

incorporated into the new medical programme. The inquiry finds that the proposal is more modern and clarifies the importance of interprofessional teamwork in the programmes, since contemporary healthcare is to be provided by teams and through interprofessional teamwork. The new proposal also clarifies interprofessional teamwork with professionals in related activities in other parts of society. Some HEIs are already working on developments to bring about collaboration with other essential functions of society, such as the police and social services. In the evaluation, some highlight that it could be useful if implemented e.g. in cases of domestic violence. The assessment panel believes that rewording the qualitative target will stimulate the HEIs to dare to think along new lines regarding interprofessional learning, e.g. with simulations and collaborations with a greater number of and "new" student groups, which is positive.

It is positive that both this thematic evaluation and the inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education] draw attention to the importance of creating clearer qualitative targets, intended learning outcomes in course syllabuses, and activities in interprofessional collaboration. Interprofessional work contributes to the quality of care and to meeting the different needs of patients. This is also noted, for example, in the National Board of Health and Welfare's comprehensive support for patient safety, and in the 2018 report *Från mottagare till medskapare. Ett kunskapsunderlag för en mer personcentrerad hälso- och sjukvård* [From recipient to co-creator. A knowledge-base for person-centred healthcare] from the Swedish Agency for Health and Care Services Analysis.

In the team, different professions contribute their competencies to achieve the targets. Interprofessional teamwork is highlighted as a prerequisite for a high level of patient safety. Teamwork is a core competence for nurses, and is included in the competence description of registered nurses and other healthcare professions. The competence implies the ability to interact with other individuals from professions, and to have knowledge, understanding and respect for the functions, roles and ethical values of other professions. This means that students need to practice teamwork with different professions. Many HEIs describe how they have built in systematic collaboration between different programmes and different healthcare professions. This takes place in particular in the clinical placement.

Working with patient cases to strengthen interprofessional learning

One teaching method to strengthen competence and skills in working interprofessionally can be simulation seminars, where students from different professions meet and interact in patient scenarios. During the evaluation's assessment meetings, the possibility for HEIs to

Interprofessional learning was conducted online during the coronavirus pandemic, and HEIs indicate that it worked well and could be a solution for HEIs that do not offer multiple health sciences programmes. Good examples of practicing interprofessional teamwork derived from the evaluation process are the following:

Good examples regarding learning interprofessional teamwork

Students from different educational programmes meet for a few days together to work with patient cases (also on-line) – this could be arranged jointly between HEIs

Teaching departments and educational clinics, where each profession works together according to clear roles

Developing case instructions – prior to clinical placements – where the importance of teamwork is made clear

Increasing training in interprofessional teamwork at clinical training centres prior to clinical placements

Portfolio or logbook approach where students are given the opportunity to reflect on their collaboration and leadership in teamwork – especially regarding power dynamics within the team

Preparation for interprofessional learning in both practical and theoretical courses.
The assessment panel would like to highlight the need for preparation for interprofessional teamwork in connection with theoretical courses, as well as in the clinical placement. The programme should contribute to strengthening the nurse's professional knowledge and the role that the nurse has in the teamwork. This competence is required to be able to collaborate in teams and be able to contribute nursing knowledge.

In order to prepare students for interprofessional teamwork, learning activities are needed, for example in the work done in study groups, that include reflection on one's own competence and skills in teamwork and leadership. The theoretical courses and components should include activities that give the students the keys and tools to work with others. Students' competence and skills also need to be strengthened, so that they in turn can argue for and make visible the contribution of nursing as a profession in the teamwork.

Power dynamics between different professions are sometimes forgotten in the context of learning activities in interprofessional teamwork, but are also an important phenomenon to be aware of.

Pedagogical models and constructive alignment for interprofessional learning can be further developed

Different pedagogical models – such as problem-based learning and peer learning as a supervision model – are highlighted by many HEIs as activities to ensure attainment of the intended learning outcome "teamwork and team collaboration". In problem-based learning, teamwork and the role of the nurse can be highlighted to solve patient cases, and in peer learning, the student solves problems together with a fellow student. Some HEIs highlight that they have person-centred or patient-focused learning models in the clinical placement that can be a way to practice interprofessional teamwork. Person-centred learning models involve the student focusing on the care of a small number of patients, which requires collaboration with several professions involved.

The assessment panel finds that the constructive alignment between intended learning outcomes, learning activities and assessments requires development for some HEIs. During the course of the evaluation, some HEIs have themselves stated that assessment criteria for interprofessional teamwork need to be formulated and known by students throughout the programme. The progression of the intended learning outcomes also needs to be developed and ensured.

Most HEIs suggest that the qualitative target and intended learning outcomes related to interprofessional learning need to be concretised in clinical practice. Supervisors may need support to ensure that learning activities and assessment are of a good standard linked to working in an interprofessional team. The assessment panel suggests that the HEI could work with the healthcare facility to, for example, create short video clips that both students and supervisors could watch prior to the clinical placement. The videos could cover the objectives, learning activities and assessment of the qualitative target. This gives the student and the supervisor a common starting point when they later meet during the clinical placement.

The design and implementation of the clinical component of the programme during the Coronavirus pandemic

The Coronavirus pandemic as a driver of change

The thematic evaluation included a question on what changes had been made to the design and implementation of the clinical component of the programme that the HEIs wished to maintain after the pandemic. The question aimed to gather knowledge about new approaches that were used and tested during the pandemic and could serve as examples for further operational development at the HEIs. It was important to get the

HEIs' views on adjustments made, as well as on the reorientation of teaching and how these could become sustainable solutions.

The evaluation shows that the resilience of the education system in times of crisis has been tested. The HEIs report that there have been a lot of challenges, most related to the shift to digital solutions. The extent of the challenges experienced by the HEIs no doubt depends on how accustomed they were to digital learning before the pandemic. Several HEIs have had distance learning as the norm for many years, and for them the shift presented fewer challenges.

Despite good preparedness, the HEIs put a lot of effort into converting the programme during the pandemic. The notable difference compared to many other higher education programmes is that nursing education has a significant proportion of courses in the form of clinical placement. They also had significant elements of digital pedagogy. This could relate to meetings with individual students, examinations and meetings with supervisors out in the healthcare facilities.

The pandemic became a strong driver for the necessary digitalisation of higher education. Sweden has both national and local strategy documents and expressed ambitions for a greater element of digitalisation of education, but the pandemic became the most potent driver for change. Teachers in the country's nursing programmes had already been using digital tools to a greater or lesser extent before the pandemic, but often alongside their teaching. There has not usually been a great need for continuing professional development in distance learning.

The level of digital literacy among teachers and educational organisations has increased since the pandemic. Innovation and creative ideas related to pedagogy and digital solutions have been developed.

Solutions developed together with the healthcare sector

In spring 2020, the Government declared that all instruction would be digital and conducted remotely. At the same time, certain healthcare facilities, especially in elderly care, could not offer students clinical placements due to the risk of infection and because healthcare facilities were facing a very stressful situation with staff absences, the introduction of new procedures, and seriously ill patients and care recipients. Many HEIs expressed that they worked with the healthcare facility and managed to arrange or postpone clinical placements for their students. This means that student completion was not significantly impacted, despite a strained situation.

The self-evaluations show that the programmes were impacted in different ways during the pandemic. However, the overall picture is that most HEIs coped well and efficiently with the shift to distance learning

and teleworking. The HEIs state that they introduced digital technology solutions, redistributed theoretical and practical courses, and devised solutions to secure spots for clinical placements. The overall picture is that the pandemic has led to better and smoother collaboration between HEIs and healthcare facilities regarding clinical placements, which is a very positive development. The digital solutions facilitated the collaboration.

Sudden use of technology and other challenges

The self-evaluations show that there have been challenges in the shift to digital. Although the thematic evaluation did not ask for an analysis on organisation and division of labour, there are statements that show that staff have probably had to work more and with new and different tasks. Some HEIs report that staff felt worn out after three waves of the pandemic, while describing some adaptation and daily life with teleworking. The self-evaluations reveal that some teachers missed having physical meetings, which they felt strengthened the social community in the workplace. The role of the campus in education and in the social community of the workplace has been clarified.

Most of the challenges mentioned are related to the sudden need to use technology. For example, there were problems with supervisors not having access to laptops in the workplace in order to be able to easily connect in meetings. There were also problems with communication, as different activities use different digital platforms for meetings, such as Zoom and Teams. Teachers also reported that digital assessment interviews can be difficult to conduct, as they lacked experience in how best to conduct the interviews using technology. Some supervisors felt unsure about using technology, which led to greater uncertainty related to the risk of failing students during clinical placement.

The HEIs also highlighted concerns with digital examinations. Several HEIs have found many advantages to using digital examinations, but there was no preparedness for this before the pandemic. It therefore became a challenge to design legally compliant examinations digitally. In its report *2021:8, Disciplinärenden 2019 och 2020 vid universitet och högskolor* [Disciplinary cases at universities and higher education institutions 2019 and 2020], UKÄ also showed that cheating in higher education increased on the whole during the pandemic. This shows that HEIs need to develop competence in designing digital examinations.

Professional development and more collaborations as a positive result of the coronavirus pandemic

In the self-evaluations, HEIs highlight that the pandemic has required solution-oriented collaboration between the HEI and the healthcare facilities, as well as internally between teachers. This is to address challenges, provide support to each other and share good practices within

the teaching faculty. There are also HEIs that state that some staff feel that pandemic and working from home resulted in a better working environment. Home working has led to lower stress levels and greater flexibility. Teachers who previously commuted or participated in the faculty via technology experienced a greater sense of community, as everyone was working under the same conditions. Working remotely made it possible to interact with more colleagues during digital meetings. The HEIs also report that teachers have been able to develop knowledge and skills in the use of technology in teaching, such as Zoom.

The self-evaluations also show that the pandemic has drawn attention to the importance of increasing students' competence in infection control. Students and teachers learned how to manage and identify risks of infection and ill health in a unique and real-life situation. Thus, the pandemic has prompted HEIs to analyse the content of the programme in terms of patient-safe care. It is positive that patient safety has been given new relevance. The inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education] also proposes that HEIs be tasked with more clearly defining intended learning outcomes for patient safety, which many programmes have already begun.

Many HEIs believe that internal and external collaboration was good during the pandemic, and that they have learned more about the importance of preparedness and collaboration in the event of a crisis. It is important that the HEIs take advantage of the crisis management that took place and the newly created procedures, and that they document them for future crises. The work during the pandemic exposed some needs for development of procedures for crises and the use of digital technology in both learning and collaboration with different actors.

The situation during the pandemic meant that several meetings had to be conducted via Zoom. Supervisors in the healthcare facilities felt that they received much better support from teachers through the possibility of Zoom meetings. Many seminars with students were also conducted using technology. This has saved resources, e.g. in the form of travel time, and has also led to better pedagogy. The HEIs have developed greater flexibility for meetings and seminars out in clinical placement, which they say they intend to maintain, probably in the form of hybrid solutions.

The coronavirus pandemic contributed to the development of new pedagogical forms and links between theory and practice

Many HEIs indicate that the pandemic contributed to the development of pedagogy, e.g. through the inclusion of several elements of seminars and resource seminars. Traditional on-site lectures were shortened in favour

of a greater number of seminars. Several HEIs report positive results from digital lectures, as there is better attendance for them compared to the physical lectures. Digitally pre-recorded lectures have also opened up for more flipped classroom pedagogy, which HEIs consider positive. In this way, digital solutions enable more student-centred learning and greater flexibility.

Some HEIs also report that the clinical placement courses have been developed with more theoretical elements, to the benefit of the link between theory and practice. Digital meetings between the HEI, the student and the supervisor prior to clinical placement have also been positive, as it enabled the communication of objectives in a more efficient way. At the same time, it has emerged that there are challenges with digital assessments of clinical placement goal attainment. The personal meeting is needed, especially when it comes to sensitive conversations. However, the advantages of digital assessments are highlighted more often than the disadvantages. Several HEIs find it easy to contact a student at risk of failing via Zoom, and that such a meeting relieves some of the intensity students experience from a scheduled on-site personal meeting. The HEIs report it has worked well to have planning, mid-term and closing meetings in digital form. For example, HEIs report that digital tripartite meetings (between teacher, supervisor and student) work very well digitally and are resource-saving. Teachers have only had to visit clinical placement sites when major problems have arisen. There are also examples of the opposite experience, where supervisors miss the face-to-face meetings and the proximity to a clinical adjunct, who was closer at hand before the pandemic.

Digital literacy in focus as a result of the coronavirus pandemic

In terms of the digital literacy development of staff, there is a fear that much of the teaching during the pandemic has been characterised by the need to adapt to an unexpected situation. Significant development of digital education requires a more fundamental and thoughtful change. If the adaptations made during the pandemic are to contribute lasting positive effects, the HEIs need to create space to think long-term in relation to the experiences gained during the pandemic.

Caution should be exercised in judging the impact of digital teaching methods solely on the basis of the rapid and structured reorganisation during the pandemic. Digital instruction based on research and experience-based pedagogical methods arguably differs from the rapid introduction of digitisation during the first phase of the pandemic.

Subsequent evaluations of education during the pandemic are likely to show that the situation forced new innovative teaching approaches using technology. Teachers and students have developed their capacity to use technology. This is beneficial when society is facing a digital

transformation. The use of digital technologies and distance learning are and will be natural features of higher education in the future. Society is digitalising, and so is healthcare. Today's students need to be able to use digital ways of working in their interactions with patients, family members and colleagues, and in order to analyse data and evaluate care processes. Some nurses will also work in workplaces that only offer digital patient interactions. There are also new technological solutions being introduced that nurses need to be able to critically evaluate. Digital instruction gives students a natural entry point into using technology to read problems that they then take with them into working life.

The inquiry *Tryggare i vårdyrket – en översyn av vissa frågor inom utbildning till sjuksköterska och barnmorska (SOU 2022:35)* [Safer in the healthcare profession – a review of certain issues in nurse and midwife education] proposes the introduction of a qualitative target in which students must demonstrate the ability to use digital tools and working methods as well as technological equipment in health and care work as a separate competence objective.

The pandemic has accelerated the development need to quality assure learning using technology. The HEIs will need to analyse the quality of distance learning and support for e-learning.

Summary reflections

During the thematic evaluation, the HEIs' self-evaluations and discussions have clearly identified common and national challenges and needs for the institutions. There is thus a consensus on identified areas for improvement. For example, competence provision is a common challenge for all HEIs, with areas for development in the long-term strategic competence provision. Here, it is important that HEIs identify their specific needs and establish competence provision plans that are continuously monitored. At the same time, there is an opportunity for several HEIs to develop combined employments between HEIs and healthcare facilities, in order to better provide for professional competence and up-to-date clinical competence. It is also essential that pedagogical competence is given equal importance to academic competence and that it is monitored over time. Competence provision is not only a matter of the number of teachers, but is strongly related to the content and quality of the programmes. There are also good examples of internal working practices in the HEIs that help to strengthen teachers' competence, such as "excellence groups", where teachers with expertise and interest in a particular area come together in groups, further develop the area, and disseminate knowledge within the teaching faculty. There are further good examples of activities to strengthen both subject and pedagogical competence in the faculty, such as annual internal pedagogical conferences.

There may be benefits in requiring supervisor training to supervise nursing students during clinical placements, to ensure the quality of that component of the programme and to ensure the best possible learning experience for the students. Shorter supervisor courses with greater flexibility may be an option, but they should be credit-bearing while maintaining quality. Several good examples of flexible forms of supervisor training are already in place, which in turn have had a positive effect on student completion. It could be beneficial for collaboration on supervisor training to take place between HEIs and with the healthcare facilities. A national supervisor training programme at the first-cycle level needs to be further explored, for example by the National Health Competence Council.

Another common challenge is to ensure a sufficient number of high-quality clinical placements in the nursing programmes. In this respect, the HEIs and the healthcare facilities need to establish cooperation agreements and clearly define the shared responsibility for clinical placements and their quality, responsibility which must be shouldered by both parties together. It is positive that many HEIs are developing new clinical placement sites as a result of society and the healthcare sector's policy to strengthen health promotion in healthcare. Basic care and rehabilitation in particular should be provided close to the patient and in the home, in line with the reform for Excellent and Local Care. The HEIs are responsible for inviting healthcare facilities to establish a dialogue in forums to discuss these issues. To this end, there are proposals such as introducing a joint learning platform for the students, the HEIs and the healthcare facilities, where training-related documents can be shared and the learning process monitored during clinical placement.

The HEIs need to review how knowledge of the nursing process makes the next-of-kin perspective explicit in intended learning outcomes and learning activities, and ensure that the perspective is assessed through examination. In order to ensure the students' competence and skills related to the nursing process, more learning activities need to be developed that include both theoretical knowledge and practical skills. In order to further strengthen students' professional competence, interprofessional teamwork should be developed, as contemporary healthcare should be provided by teams and through interprofessional teamwork. Digitalisation in society and in healthcare means that health sciences programmes need to create the conditions and preparedness among students to use digital technologies, and also to be key actors in the development of technology use in e-health and welfare technology. Experiences from the pandemic have given HEIs knowledge and experience in working more in virtual environments, which could be further applied to give students experience of working remotely using different technologies and provide more opportunities for learning. Forms of this could include recorded lectures, digital patient cases and simulation exercises.

The ongoing coronavirus pandemic has accelerated the digitalisation of healthcare and higher education. One of the positive benefits of increased digitalisation for the clinical component of nursing education is that the collaboration between HEIs and the healthcare facilities has been strengthened through digital contacts. The Swedish Association of Local Authorities and Regions notes that the healthcare sector has developed digitalisation at a rapid pace as a result of the pandemic.

UKÄ notes that the same development has taken place in higher education. In order for this necessary development to continue and be further accelerated in education, the HEIs need to ensure the quality of education with the help of both technology and the competence and skills of the teachers. This applies in particular to digital assessments.

On behalf of the assessment panel,

Karin Blomberg, Chair
Marie Elf, Deputy Chair
Lisa Skär, Deputy Chair

The Swedish Higher Education Authority (Universitetskanslersämbetet – UKÄ) is to contribute to strengthening Swedish higher education and Sweden as a knowledge society. We review the quality of higher education programmes; we analyse and follow-up trends within higher education and we monitor the rights of students.

uka.se