



TUNING

Guidelines and Reference Points for the Design and Delivery of Degree Programmes in Nursing

Edition 2018

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Tuning Educational Structures in Europe

The name Tuning was chosen for the project to reflect the idea that universities do not look for uniformity in their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply for points of reference, convergence and common understanding. The protection of the rich diversity of European education has been paramount in the Tuning Project from the very start and the project in no way seeks to restrict the independence of academic and subject specific specialists, or undermine local and national academic authority.

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Guidelines and Reference Points for the Design and Delivery of Degree Programmes in Nursing

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1. Introduction

Tuning Guidelines and Reference Points 2018 for the Design and Delivery of Degree Programmes in Nursing is a new edition of a document published in 2011. Prepared by an international group of academics and validated by independent international peers, this publication has proven its importance as a primary source of information and a stimulus for reflection among stakeholders.

An update is now necessary: both the subject area and society have changed considerably in recent years. Since this brochure serves as an international reference point for an academic discipline in the European Higher Education Area (EHEA) framework, it is essential that it represents the current state of affairs. These *Guidelines* now concerns not only degree profiles and the tasks and societal roles graduates will take on, but also how different degrees fit into the wider context of overarching qualifications frameworks. In other words, which are the essential elements that constitute a particular subject area in higher education? Among other aspects, these *Guidelines* include general descriptors for the first and the second cycle, the bachelor and master, presented in easy-to-read tables, and are meant to be used as reference points for the design and delivery of individual degree programmes. According to the Tuning philosophy, each degree programme has its own unique profile, based on the mission of the institution and taking into account its social-cultural setting, its student body, and the strengths of its academic staff.

The *Guidelines and Reference Points* are the outcome of a long and intense collaboration, starting in 2001, in conjunction with the early phases of the Bologna Process, which has now come to include 48 European countries. They are a result of the grassroots university-driven initiative called Tuning Educational Structures in Europe, or simply 'Tuning', that aims to offer a universally useful approach to the modernisation of higher education at the level of institutions and subject areas. The Tuning initiative has developed a methodology to (re-) design, develop, implement and evaluate study programmes for each of the Bologna cycles. Validated in 2007-2008 by a large group of respected academics from numerous academic sectors it still stands.

The Tuning methodology is based on the student-centred and active learning approaches it has promoted since its very launch. Tuning's mission is to offer a platform for debate and reflection which leads to higher education models able to ensure that graduates are well prepared for their societal role, both in terms of employability and as citizens. Graduates need to have obtained as the outcome of their learning process the optimum set of competences required to execute their future tasks and take on their expected roles. As part of their education graduates should have developed levels of critical thinking and awareness that foster civic, social and cultural engagement.

Using the Tuning reference points makes study programmes comparable, compatible and transparent. They are expressed in terms of learning outcomes and competences. Learning outcomes are statements of what a learner is expected to know, understand and be able to demonstrate after completion of a learning experience. According to Tuning, learning outcomes are expressed in terms of the *level of competence* to be obtained by the learner. Competences represent a dynamic combination of cognitive and meta-cognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values. Fostering these competences is the object of all educational programmes. Competences are developed in all course units and assessed at many different stages of a programme. Some competences are subject-area related (specific to a subject area), others are generic (relevant for many or all in degree programmes). According to the

Tuning philosophy, subject specific competences and generic competences or general academic skills should be developed together. Normally competence development proceeds in an integrated and cyclical manner throughout a programme.

The initial core competences of the subject area were identified in a consultation process involving four stakeholder groups - academics, graduates, students and employers - during the period 2001-2008. Since then similar consultation processes have been organised in many other parts of the world: these have been taken into consideration in developing this new edition. This edition has been elaborated as part of the CALOHEE project (*Measuring and Comparing Achievements of Learning Outcomes in Higher Education in Europe*), co-financed and strongly supported by the European Commission as part of its Action Programmes for Higher Education. CALOHEE project aims to develop an infrastructure which allows for comparing and measuring learning in a (trans)national perspective. Besides updating and enhancing the reference points brochures it has also developed Assessment Frameworks which offer even more detailed descriptors than those presented in this document. The Assessment Frameworks are published separately.

To make levels of learning measurable, comparable and compatible across Europe academics from the single subject areas have developed cycle (level) descriptors expressed in terms of learning outcomes statements. In this edition, for the first time these are related one-to-one to the two overarching European qualifications frameworks, the 'Bologna' Qualifications Framework for the EHEA (QF for the EHEA) and the EU European Qualifications Framework for Lifelong Learning (EQF for LLL). In the CALOHEE project these two meta-frameworks have been merged into one model to combine 'the best of two worlds'. While the EQF for LLL is focused on the application of knowledge and skills in society, the focus of the QF for the EHEA is more related to the learning process itself: it applies descriptors which cover different areas or 'dimensions' of learning: knowledge and understanding, application of knowledge and understanding in relation to problem solving, making judgments, communicating information and conclusions, and finally, knowing how to learn.

In developing the CALOHEE Tuning model, we realised that 'dimensions' are an indispensable tool, because they make it possible to distinguish the principal aspects that constitute the subject area. Dimensions help give structure to a particular sector or subject area and also make its basic characteristics more transparent. Furthermore, the 'dimension approach' is complementary to the categories included in the EQF for LLL, which uses the categories of knowledge, skills and competences to structure its descriptors. Thus, in CALOHEE terms, the three columns correspond to a 'knowledge framework', a 'skills framework' and a 'competency framework', linked by level. The last column, the 'competency framework', refers to the wider world of work and society and identifies the competences required to operate successfully in the work place and as a citizen. It builds on the first two elements: knowledge and understanding and the skills necessary to develop and apply this knowledge.

In addition to addressing cycle-level descriptors, Tuning has given attention to the Europe-wide use of the student workload based European Credit Transfer and Accumulation System (ECTS) to ensure the feasibility of student-centred degree programmes. Some ten years ago it transformed the original credit transfer system into a transfer and accumulation system. According to Tuning, ECTS not only allows student mobility across Europe and in other countries as well; it can also facilitate programme design and development, particularly with respect to coordinating and rationalising the

demands made on students by concurrent course units. In other words, ECTS permits us to plan how best to use students' time to achieve the aims of the educational process, rather than considering teachers' time as the primary constraint and students' time as basically limitless.

The use of the learning outcomes and competences approach implies changes regarding the teaching, learning and assessment methods. Tuning has identified approaches and best practices to form the key generic and subject specific competences. Some examples of good practice are included in this brochure. More detailed examples can be found in the subject area based Assessment Frameworks.

Finally, Tuning has drawn attention to the role of quality in the process of (re-)designing, developing and implementing study programmes. It has developed an approach for quality enhancement which involves all elements of the learning chain. It has also developed a number of tools and identified examples of good practice which can help institutions to improve the quality of their degree programmes.

This brochure reflects the outcomes of the work done by the Subject Area Group (SAG) in **Nursing** which was established in the context of the CALOHEE project. This SAG has built on the work of the SAG or SAGs that produced the previous editions of the brochure, as well as the work established by the European History Networks, CLIOHWORLD. The names of the members of the previous SAGs appear in chapter 2. The outcomes are presented in a template to facilitate readability and rapid comparison across the subject areas. The summary aims to provide, in a very succinct manner, the basic elements for a quick introduction into the subject area. It shows in synthesis the consensus reached by a subject area group after intense and lively discussions in the group. The more ample documents on which the template is based are also included in the brochure. They give a more detailed overview of the SAG's conclusions.

We hope that this publication will be of interest to many, and look forward to receiving comments and suggestions from the stakeholders, in view of further improvement.

The Tuning-CALOHEE Management Team

2. The Tuning - CALOHEE Nursing Subject Area Group (2016-2017)

The working group is co-ordinated by Mary Gobbi and Marja Kaunonen, who have edited the brochure. The CALOHEE SAG members listed below have all contributed to the construction of this brochure.

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We acknowledge the considerable work undertaken by our Tuning nursing predecessors in generating the first edition of the brochure. Their names are acknowledged in Appendix 4.

3. Introduction to the Subject Area

3.1 Background and context

As discussed in the introduction, one crucial plank of the Tuning project is the identification of points of reference for generic and subject specific competences at first, second and third cycle graduates in their respective disciplines. Nursing joined the Tuning project in 2003 as the first 'harmonised' healthcare regulated discipline to apply the methodology. In this booklet, we present the revised second edition material from the Tuning documents produced by the Second Nursing Subject Area Group (SAG2). Since our last published work, there have been significant developments within the field, which we now outline.

The first Tuning Nursing SAG1 (2003-2009) created a platform for debate, lobbying and reform within the EU professional space. During this period, the SAG1 developed competences for general nurses at the first cycle level (Bachelors level). These competences were designed to be compatible with the registration/licence to practice associated with what was originally known as Directive 77/452/EEC. This Directive was subsequently consolidated within the Directive 2005/36 on the recognition of professional qualifications and its subsequent amendments (see Appendix 3). The Tuning competences were used to inform national and local benchmarks for nursing (e.g. Denmark, United Kingdom, Republic of Ireland, Italy). Directive 2005/35 was due to be evaluated from 2010/ 2011. In collaboration with other key stakeholders, the Tuning Nursing group played a significant role in the feedback processes and recommendations for the subsequent revision (see Gobbi, 2014). The new Directive (2013/55/EU) incorporated some of these recommendations, which have had significant implications for nursing education, namely:

- Introduction of competences (see Appendix 3)
- The capacity to use European Credit Transfer System (ECTS) to express the theoretical and clinical training hours requirement for nursing (see Appendix 3)
- The opportunity to make amendments to the Annex of the Directive to update the current curriculum content. (Appendix 3)
- Language requirements for those seeking mutual recognition under the terms of the Directive.

For further details please see-

<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32013L0055>

Unfortunately, a two-tier track option for entry to nursing programmes (10 and 12 years of general school education respectively) was also introduced and the implications of this have yet to be realised. It was timely therefore for the new Nursing SAG2 to continue the work of their predecessors and to revise and refine the competences in the light of the amended Directive and the developments in contemporary health and population needs. We sought to review the extent to which the competences were amenable to assessment and responsive to the contemporary challenges and trends in the EU and external environment, particularly with respect to global health, security, migration and the evolving role of nurses.

Nursing activity continues to vary across the European space in relation to the role of registered nurses in society, the organisation of the health and welfare systems, the legal authority and accountability afforded to nurses and the available national resources of the labour market and economy. The scope of registered nursing practice includes the following spheres of responsibility: giving direct care, supervising others, leading, managing, teaching, undertaking research and developing health policy for health care systems (ICN, 2004). Noticeable advances in the nursing scope of practice indicated in the

first edition are now more prevalent. For example: nurse prescribing, telenursing, advanced, specialist and consultant nurses.

The number of countries providing bachelors, first cycle nursing education for registration continues to rise. Similarly, there has been a rise in post graduate programmes in nursing at second and third cycle levels. Research capacity is still in its infancy in some countries, while others are gaining respectability and status within the broader medical and scientific disciplines. Pioneering and high quality nursing research has established connections between nursing activity, level of education, workforce conditions and patient dependency, patient experience and outcomes (see Griffiths et al, 2017; Ball et al, 2016; Dall'ora et al, 2016; Aitken, et al. 2014). These studies have drawn attention to the importance of working conditions for the well-being of both patients, staff and by implication students.

The professional / academic literature continues to debate the topics concerning the nature of nursing, nursing competence, nursing pedagogy, clinical learning and decision making, and the struggles for professionalization within a group that is predominantly female in many countries. For the purposes of the Tuning project, the first cycle competences were designed for the contemporary professional, first level registered nurse. At the SAG1 meeting in Athens 2003, the Tuning group adopted a *working* definition of the professional first cycle registered nurse, namely,

This registered nurse is a professional person achieving a competent standard of practice at first cycle level following successful completion of an approved academic and practical course. The registered nurse is a safe, caring, and competent decision maker willing to accept personal and professional accountability for his/her actions and continuous learning. The registered nurse practises within a statutory framework and code of ethics delivering nursing practice (care) that is appropriately based on research, evidence and critical thinking that effectively responds to the needs of individual clients (patients) and diverse populations.

Since 2006, the Tuning group have particularly welcomed the collaborative support given by the European Federation of Nurses Associations, the European Council of Nursing Regulators, the European Federation of Nurse Educators, the European Nurse Directors Association and the International Council of Nurses. These key collaborators were involved in the validation of the first Nursing Competences in 2007. They have continued to work strategically with the Tuning group with respect to the revisions to the Directive and other related nursing projects. Their contributions have been crucial to the success of the movement towards a competence based framework for nursing within the EU.

In our first edition, we discussed how the adoption of the ECTS system could address some of the challenges posed by the variability of nurse education models. The new Directive 2015/55/EU- which now recognises ECTS- will enable a gradual move to better align development opportunities for nurses following their registration. However, we draw particular attention to the fact that the subject area of nursing operates within and between the ECVET (European Credit System for Vocational Education and Training, 2005), ECTS, the EQF and Dublin Descriptors. The two credit based systems operate in different ways, thus making it difficult for nurses trained in the ECVET system to gain recognition in the Higher Education system for their learning achievements. It is crucial that these different systems align to aid recognition and accreditation of different competences and skills both theoretically and practically. Interestingly, the ECVET technical specification identifies the 'competent body responsible for the qualification or its implementation' as the body that 'allocates the ECVET credit points to each unit [module] according to the relative volume, weight and level of knowledge, skills and competences to be acquired'. It is unclear therefore whether the ECVTS credits with

respect to those programmes that meet the requirements of the EU Directive, are the responsibility of the vocational training institution (e.g. a hospital training school) or the national competent authority. Likewise, because the scope of nursing practise with respect to the nurse degree of autonomy and authority varies from country to country, irrespective of their academic qualification, it is sometimes difficult to categorise an individual's achievements according to the descriptors or criteria of these different Qualification or Credit Frameworks. It is therefore crucial that work continues to harmonise these anomalies and interactions at the EU level to make explicit the horizontal and vertical achievements of competences whether clinical or theoretical.

3.2. Trends and challenges

The global factors influencing health care and nursing are seen most clearly in the recent challenges faced within the EU by terrorism, the rapid and global spread of some infectious diseases, and the impact of migration due to disasters, conflict and relative poverty (see Gobbi, 2016).

Diversity: a challenge of the 21st century

Patients and nurses have a diverse set of identifies, some of which become relevant in the health care context. This diversity has been conceptualized in nursing as 'cultural competence' in its broadest sense, "...the gradually developed capacity of nurses to provide safe and quality healthcare to clients with different cultural backgrounds. ... cultural background in this tentative definition is determined by variants, such as age, gender, race, ethnicity, religion, education, socioeconomic status, geographic region, and occupation [and ability/disability, sexuality, health beliefs, ...]¹.

The *nursing process* [assessing, (diagnosing), planning, implementing, evaluating] suggest that the nurse should assess the patient, identifying needs, problems and contextual factors and work with them to develop solutions. Ideally, issues around socioeconomic status or legal status in a country should be assessed as part of this process. For example, in the turbulent socio-political circumstances in Europe of 2017-18 people are migrating in large numbers around the world, both legally and *extra-legally* (economic migrants, refugees, asylum seekers). According to national and international law, migrants of all kinds have varying access to treatment in the country in which they are seeking care.

Professionalism in nursing requires not only knowledge and skills to implement the nursing process but also attitudinal skills to apply the nursing process to the *person in front of them* at a particular moment in time. However, the nurse is also an individual with their own set of beliefs, values and norms working in a local context. This influences their communication and interaction, which affects the outcomes of care.

Nursing education addresses these individual and social hindrances to nursing care by defining the professional knowledge, skills and attitudes required to nurse patients of all backgrounds. Dimension 1 of the revised CALOHEE framework details three sub-dimensions of professional values and the role of the nurse; 1) practicing within the context of ethical and legal codes, 2) accepting responsibility for own professional growth and development and 3) educating, facilitating, promoting, supporting and encouraging the health and wellbeing of patients.

Within this framework, nursing education provides a supportive yet challenging environment for the student to develop the skills of self-reflection and awareness. This enables students to identify their own social and personal hindrances to providing

¹ Cai, D. Y. (2016). A concept analysis of cultural competence. *International Journal of Nursing Sciences*, 3(3), 268-273.

'culturally competent' care and to develop strategies to address these limitations. Further, nursing education requires students to identify impediments due to the structure and organization of healthcare and to engage with approaches to address them. This aspect of professionalization is advanced by nursing researchers investigating both practice and education.

Another aspect to delivering culturally competent care is the ability to test models of care and medical treatment to ascertain whether they are (a) culturally acceptable; (b) clinically effective, and (c) require cultural adaptation for acceptability and efficacy. To address these challenges, nurses require competences in conducting culturally acceptable research/audits with patients, carers and therapists.

Addressing the demographic and health challenges of Europe in the context of the nursing workforce requires a more flexible and sustainable workforce, equipped to deal with the challenges of the 21st century.

Social Entrepreneurship

An emerging area of importance is the role of nurses and nursing in social entrepreneurship. In these situations they seek innovative ways to collaborate with patients, communities, populations and other change agents to innovate and co-design solutions to health care problems. The skills sets for this include an understanding of leading and managing change, principles of co-design, collaboration and financial management. At the masters and doctoral level, these skills will become increasingly important in the future.

4. Typical Degree Profiles and Occupations

4.1 Introduction

The first edition discussed how the country membership of SAG1 reflected the various academic and socio-cultural developmental stages of nursing and nurse education within the European space. This remains the case in SAG2 where the outcome of a country specific survey (n =17) revealed a similar situation. For example, a study of the minimum academic level specified by the relevant competent authorities –reveals: first cycle programmes with registration; programmes equivalent to two thirds or fifty per cent of a first cycle programme; countries that have made the transition from minimal higher education association to first cycle; and situations where nurses acquire their professional training at secondary school level with no higher education qualifications with registration. In some countries, academic nursing still remains embryonic and often under the control of medical, science or humanities Faculties. A more recent trend is the development of Faculties of Health Sciences, in which professions like nursing; midwifery and allied health are co-located. One consequence of this trend is the facilitation of interprofessional education and the strengthening of these professions. However, occasionally this has been at the expense of interaction with medical Faculties. The SAG2 survey revealed five research led universities, one specialised university, four Universities of Applied Sciences and ten general comprehensive universities.

Higher Education Qualifications at First, Second or Third cycle levels may be awarded in Nursing Practice, Nursing Studies, Nursing Science or Humanities according to local custom. This title assigned to an academic nursing degree is usually associated with where the nursing department is situated in the higher education institution. We continue to use our earlier definitions, where the use of the term ‘nursing’ alone is reserved for programmes where there are practice-based competences as a requirement of the programme award. To distinguish this type of degree from others, the term nursing science is used interchangeably with the term nursing studies. The use of the word ‘science’ is not meant to convey a commitment to a positivist model for nursing; rather this reflects common usage of this term in many parts of Europe. It is important to acknowledge that nursing is a practice-based profession at all levels of its education. In programmes where practice competences are a requirement of the award, then the clinical learning experience and supervision is crucial to the student’s development. This applies equally to first, second or third cycle studies, whose typologies remain largely the same as in 2008.

First, second and third cycle degrees in nursing often comprise two main types, those that are associated with professional registration or the further development of practice based competences and those that are purely theoretical in nature. Students entering the profession who undertake first cycle degrees do so in the associated Faculty and predominantly study nursing itself. In many countries there is a range of provision, and in some cases paucity of opportunities, for nurse education, particularly with respect to lifelong learning. Many countries remain unfamiliar with mechanisms for the accreditation and recognition of prior learning and experience in nursing theory and practice. Broadly speaking academic qualifications at first or second cycle for *registered* nurses fall into six categories representing the typical current career routes of nurses:

1. Leadership, management and administration of health services
2. Practice focused courses (e.g. Clinical nursing specialities and advanced nursing practice including public health nursing and nurse practitioners)
3. Nursing Science and research
4. Research methods in health.

5. Nurse education and pedagogy
6. Generic programmes

Some of these programmes are also assessed in clinical practice and may be regulated at national level – particularly at second cycle, for example, advanced nurse practitioners. Some sub cycle courses meet specific labour force needs (e.g. intensive care) with some being regulated- including nurse and midwife prescribers. There is a rapidly expanding provision at masters level with a strengthening of the clinical nursing programmes. The European Specialist Nurses Organisations group (ESNO see <http://www.esno.org/>) has developed frameworks for nursing specialisms. A feature of the new Directive is the facility to develop Common Training Principles and Frameworks for specialist qualifications. Once approved, these common training frameworks would provide vehicles for mobility. Both ESNO and the European Society of Cardiology are exploring these issues with respect to the common training frameworks (<http://www.escardio.org/Education>). Hence, where the competences developed at masters level in Tuning 2008 were for generic nursing competences, we now need to address masters level in nursing practice.

Increasingly, registered nurses undertake a range of interprofessional/multidisciplinary courses with their health, social care and education colleagues, for example in health education, community studies, rehabilitation, nutrition, public health, counselling, asthma and elderly care. In some countries, specialisation occurs as vocational training rather than university/higher education. In contrast, others are now developing ‘consultant nurses²’ at professional and/or doctoral (third cycle level) with these practitioners having been established for a decade in some countries. Barr (1998) outlined the three types of competences in the context of health interprofessional education, namely:

- **Common** Competences are those held in common between all professions.
- **Complementary** Competences distinguish one profession and complement those which distinguish other professions.
- **Collaborative** Dimensions of competence which every profession needs to collaborate within its **own** ranks, with other professions, with non-professionals, within organisations, between organisations, with patients and their carers, with volunteers and with community groups.

With respect to course content, Barr suggests that

- *Common content* is where programme participants learn the same content.
- *Comparative content* is where participants learn about one another.
- *Mixed content* comprises a combination of both common and comparative content.

Taking these factors into account, interprofessional programmes or content need to make the above competences and content requirements explicit.

There are two types of doctoral studies in nursing. The first is the traditional empirical/theoretical based doctorate (PhD). The second is the ‘professional or clinical’ doctorate. The latter is emerging in nursing (and other allied health professions) as nurses have more academic and professional opportunities to become more specialist and can lead and advance practice managing a user case load as an independent and autonomous practitioner (see Section 7). With respect to employment after 3rd cycle education, it was noticed by SAG1, that most of the graduates are employed by academic

² Consultant nurses are prepared at a minimum of second cycle level and have demonstrated advanced competences in expert clinical practice, leadership, research and education . Most are now at third cycle level.

faculties, either as educators, researchers or in joint appointments, e.g. 75% teaching combined with 25% research. Doctorally qualified nurses work in nursing colleges or polytechnics as senior educators in vocational or professional education. Another opportunity is employment as a researcher in a research institute. A more recent, and welcome phenomena, is the increasing numbers of doctorally prepared third cycle nursing graduates in the health sector. Those with a clinical doctorate might work as clinical specialists, nurse consultants or as clinical researchers in the area of their expertise. Third cycle graduates have also found work opportunities as managers, policy makers or high ranking civil servants in the health or social care field.

In summary, the depth and breadth of the competence set of nurses at different stages of their professional and academic development is such that they are very employable. They have opportunities not only within the field of direct patient care, but also in the broader health system and beyond as the SAG2 survey confirmed.

Tables 1 and 2 outline the typical degree profiles at first and second cycle.

Table 1. First cycle profiles and occupations

	First cycle preparation for registration/licence for non nurses	First cycle programme including practical competences for registered nurses (nursing practice)	First cycle programme without practice competences for registered nurses
Typical name of degree	According to Faculty tradition, BSc, BA, or BN in Nursing, Nursing Studies or Science More recently emergence of Health Science degrees.	According to Faculty tradition, BSc, BA, or BN in Nursing or Clinical Practice.	According to Faculty tradition, BSc, BA, or BN in Nursing Studies Nursing Science Nursing and Health Management (as first degree after the professional degree in Germany)
Profile of studies	For general nurses, this programme will ensure requirements for EU Directive ³ have been met- 3 years and 4600 hours. Specified content of theoretical and clinical instruction. Requirements for registration by competent authority will have been met. Academic standards will meet national frameworks. Some countries have national standards/	Study programme for registered nurses to gain a first cycle degree. Usually in one or more of the following areas:- Leadership, management and administration of health services Clinical nursing specialities and public health General nursing studies Research methods in health.	Study programme for registered nurses to gain a first cycle degree. Usually in one or more of the following areas:- Leadership, management and administration of health services Clinical nursing specialities and public health General nursing studies Research methods in health.

³ EU Directive 2005/36/EC and from 2016- 2013/55/EU

	competences for nursing theory and practice. May have interprofessional or multidisciplinary components	Nurse education and pedagogy May have interprofessional or multidisciplinary components In addition a strong focus on increasing practice based competences.	Nurse education and pedagogy May have interprofessional or multidisciplinary components
ECTS range	180-240 Majority at 180, but increasingly over 4 years.		
Assessment of practical competences	Yes	Yes	No
Most relevant competences-subject specific	All domains are crucial, but there is less emphasis on leadership, management and administration of health services and research skills. National focus according to the health and education systems and health needs of population.	Focus on clinical competences and related humanities and science basis. Research skills in health and nursing practice Management skills	Emphasis according to the main speciality of the degree. Research skills in health and nursing.
Most relevant competences-generic	Application of knowledge to practice. Ethical Commitment.	Application of knowledge to practice. Ethical Commitment.	Application of knowledge to practice. Ethical Commitment.
Occupational destinations	Registered nurse according to country tradition in governmental, voluntary/non-governmental and private sectors and academia. Access to other occupations related to health and social care (e.g. pharma, medical devices) Access to other person centred occupations (e.g. service industries).		

Table 2.- Second cycle profiles and occupations

	Second cycle with enhanced clinical/practice competences for nurses	Second cycle for registered nurses according to area of focus
Typical name of degree	According to Faculty tradition, MSc, MA, or MN in Nursing or Clinical Practice.	According to Faculty tradition, MSc, MA, or MN in Nursing, Nursing Studies or Science or topic areas named below
Profile of studies	Study programme for registered nurses to gain a second cycle degree. Usually in one or more of the following areas:-	Study programme for registered nurses to gain a second cycle degree. Usually in one or more of the following areas:- Leadership, management and administration of health services

	<p>Leadership, management and administration of health services</p> <p>Clinical nursing specialities/ public health</p> <p>Advanced nursing practice/nurse practitioner</p> <p>General nursing studies</p> <p>These programmes may have interprofessional or multidisciplinary components</p> <p>Academic standards will meet national frameworks.</p> <p>Some countries have national standards/ competences for nursing theory and practice.</p> <p>More specialist knowledge related to nursing practice.</p> <p>In addition a strong focus on increasing practice based competences</p>	<p>Clinical nursing specialities/ public health</p> <p>Nursing science and research</p> <p>General nursing studies</p> <p>Research methods in health.</p> <p>Nurse education and pedagogy</p> <p>May have interprofessional or multidisciplinary components</p> <p>Academic standards will meet national frameworks.</p>
ECTS	Range is 90-120	
Assessment of practical competences	Yes	No, although this will depend upon the speciality and subsequent occupation.
Most relevant competences-subject specific	<p>Focus on clinical competences and related humanities and science basis.</p> <p>Development of Research skills in health and nursing practice.</p> <p>National focus according health and education systems and health needs of population.</p>	<p>Emphasis according to the main focus/speciality of the degree outlined above.</p> <p>Development of Research skills in health and nursing.</p>
Most relevant competences-generic	Emphasis according to the main focus/ speciality of the degree outlined above. Analysis, problem solving, development of research, audit and/ or evidence based skills. Self-reflection. Ethical Commitment, Leadership and Team Working.	
Typical occupational destinations	<p>Clinical speciality focus- nurse specialist, clinical nursing leadership, nurse teacher or lecturer of nurses.</p>	<p>Leadership/management or administration focus- Nurse or health services manager</p> <p>Education focus- Teacher or lecturer of nurses</p> <p>Research/audit methods- Research career in nursing. Academic career or based in health services for research or audit.</p>

The majority of the first cycle programmes now have a window for both international mobility, electives or minor options. Due to the regulated nature of the programmes, the credits assigned are mainly under 20 ECTS credits aligned to the programme outcomes.

4.2 Role of the subject area in other degree programmes

Given the regulated nature of the academic and professional programmes associated with nursing, the subject area itself rarely contributes to other degree programmes. This is not to say that there may not be shared learning and teaching with other health /social care disciplines and professions. For example, there may be joint programmes to develop individuals as registered nurses and social workers. Similarly, registered nurses may undertake modules/units of their programme with other disciplines, (e.g. pharmacology, ethics, research, sociology, public health, leadership and management or psychology of health), but the 'pure' nursing units are rarely undertaken as part of other degree programmes. Interprofessional learning is increasing at all cycles, but specifically at first cycle pre-registration level is where competences are held in common with other health/social care students.

5. Level Descriptors, Learning Outcomes and Competences

5.1 Competency profiles

The original level descriptors for nursing took into account the Dublin descriptors (see www.jointquality.org), the descriptors in the Qualifications Framework for the European Higher Education Area and other relevant (national) frameworks. Due to the evolving state of nursing practice, education and research in the majority of European Countries, they have been further refined in SAG2. These competences **must** be viewed in the context of the scope of practice of the general nurse within a given country. The competences outlined later should also be expressed in the context of both the level descriptors and the nurse's scope of practice. The format for outlining the level descriptor for the nurse is as follows:

- Summary Competence profile
- Goals of the competences- intellectual, professional and academic and where appropriate the practical competences
- Associated formal requirements: admission requirements, programme length and further education opportunities.

Before proceeding further, we need to define some of the terms that will be used within the competences and learning outcomes descriptions. First, we define the concept of family as referring to two or more individuals who depend on another for emotional, physical and, economic support. The members of the family are self-defined⁴ Second, we shall refer to the person (s) receiving nursing care and practice as '*patient*'. This is a pragmatic decision to avoid a lengthy articulation of the various terms that can refer to the person- for example child, adult, client, patient, service user. Hence for the purposes of articulation, the term '*patient*' is used in an *inclusive* manner to refer to the person, irrespective of age, state of health, illness or cognitive ability, with whom the nurse will interact. The term population will refer to its epidemiological definition and, within the context of health education or health promotion, the term person will be applied.

Cycle Level Descriptors

First cycle level descriptors

Competency profile for the qualification with registration

A Bachelor in Nursing / Nursing Science will have achieved specified competences acquired during a development-based study programme located in an academic environment with research affiliation. The programme will include relevant mandatory theoretical and practical components agreed in dialogue with stakeholders and competent authorities.

The graduate should possess basic knowledge of, and insight into, the central disciplines, research processes and methodologies used in the nursing profession. These attributes should qualify the graduate to carry out vocational functions and to act independently within the area targeted by the study programme. The graduate should be equipped to undertake further work/practice based learning and, where appropriate, for further study in a relevant professional area, second or third cycle programme.

⁴ adapted from Kaakinen JR, Gedaly-Duff V, Coehlo DP, Hanson SMH. Family Health Care Nursing: Theory, Practice and Research. 4th ed. Philadelphia: F.A. Davis Company; 2010.

Competency goals

A Bachelor in Nursing / Nursing science is able to:

Intellectual competences:

- describe, formulate and communicate profession –related issues and options for taking action
- analyse profession-oriented issues theoretically and consider them in practice
- structure own learning

Professional and academic competences

- apply and evaluate different methodologies and disciplines relevant to nursing
- demonstrate insight into central theories, methodologies and concepts within the nursing profession
- document, analyse and evaluate the various approaches, tools or models of nursing practice
- utilize research and development to develop evidence-based nursing and nursing activities

Practical competences

- demonstrate proficiency in the practical nursing competences/skills required for the registration or licence (see list of first cycle competences)
- make and justify decisions based on his or her own nursing experience
- show personal integrity and act within the framework of nursing ethics and national scope of practice
- demonstrate ability and willingness to function in a multidisciplinary setting
- participate and conduct development work, audits and projects relevant to the nursing profession

Formal aspects

- ***Admittance-*** Should meet University requirements or equivalent (includes aptitude for person based discipline and ethical commitment-‘good character’ and language competence)
- ***Programme Length a minimum of 180--240 ECTS credits*** (we recommend that future programmes should include a minimum of 90 credits designated for the practical competence and that the programme length should be at least 240⁵. Please see section ‘Student workload and ECTS credits’.
- ***Further education options:*** Second cycle /Master programmes, Professional theoretical and practical programmes. Development as leader/manager, clinical specialist, educator or researcher.

Second cycle level descriptors

Competency profile for the qualification

A Master in Nursing Science/Studies graduate will have achieved competences that have been acquired via a course of nursing studies situated in a research environment context. The graduate is qualified for employment in the labour market on the basis of his or her academic discipline (nursing science), professional competence (nursing) as well as for further research (doctoral studies). When compared to a first cycle graduate in nursing / nursing science, the second cycle graduate will have developed his or her academic knowledge and independence so as to be able to apply scientific theory and method on an independent basis within both an academic and professional context.

In the case of a candidate studying for a second cycle degree in clinical nursing with associated practice competences, then the person will be able to perform advanced and/or specialist nursing activities as defined by their scope of practice. At the European level, the specific subject clinical/practical competences for the Master in Nursing (Practice) are to be developed as they currently vary from one country to another and reflect institutional options and the scope of practice for the nurse. We offer some suggestions and examples in this domain.

Competency goals

In addition to the competences described for the first cycle/Bachelor's degree, a second cycle/Masters in Nursing / Nursing Science graduate is able to:

Intellectual competences

- Communicate complex professional and academic issues in nursing and nursing science to both specialists and lay people in a clear and unambiguous manner
- Formulate and analyse complex scholarly issues in nursing and nursing science independently, systematically and critically in the relevant specialisation
- Continue own competency development and specialisation in a manner that may be largely self-directed or autonomous

Professional and academic

- Evaluate the appropriateness of various methods of analysis and complex issues in nursing and nursing science from an academic and advanced professional nursing perspective
- Demonstrate:
 - specialist understanding in extension of the Bachelor degree
 - a broader academic perspective for his or her Bachelor degree
 - new academic competences in addition to his or her Bachelor degree
- Demonstrate comprehensive understanding of research work in nursing science and therefore be capable of participating in research.

Practical competences

- Make and justify decisions reflecting on social and ethical responsibilities as well as nursing and nursing science issues and if necessary carry out analysis that results in an adequate basis for decision-making
- Comprehend development work based on scholarly, theoretical and/or experimental methods in nursing and nursing science
- Make and ensure that that clinical practice is based on relevant evidence and knowledge.
- Demonstrate ability to involve both patients and close relatives in care and treatment on advanced level.
- Demonstrate practical insight into the implications and applications of research and evidence based practice in a practice based profession (research ethics, governance, audit).

Formal aspects

- ***Admittance requirements:*** Selected first cycle degree programmes with a satisfactory performance or professional equivalent (for professional practice programmes this includes aptitude for person based discipline and ethical commitment and may include specified professional practice experience).
- ***Length:*** 90 or 120 ECTS credits (we recommend that future programmes that focus on advanced/specialist practice should assign designated credits for the practical competence and that the programme length in this case should be at least 120 credits)
- ***Further education options:*** Doctoral programmes or specialist nursing.

Third cycle level descriptors

Competency profile

A doctoral studies graduate in nursing science will have achieved competences acquired through a course of nursing studies based on empirical work. This would include original research conducted on an independent basis. Within an international context, the graduate is able to conduct research, development and teaching tasks at academic, health care settings and other organisations where a broad and detailed knowledge of research in nursing science is required. Their research will have been based on an appropriate research method in, or applied to, nursing and thus yields a research effort that equals the international standard for doctoral studies.

A clinically focused doctorate graduate will have conducted empirical work that is work/practice focused and will have gained increased competences in work based functions (see section 8). At the European level, the specific subject clinical/practical competences for the Doctorate in Nursing (Practice) are to be developed as they currently vary from one country to another and reflect institutional options and the related scope of practice for the nurse.

Competency goals

In addition to the competences described for the second cycle, a third cycle nursing graduate is able to:

Intellectual competences

- Communicate, and defend, a substantive, contemporary and detailed knowledge of a specific area of nursing both orally and in writing
- Formulate and structure a long-duration, continuous research project on an independent basis

A 'professional' doctorate graduate would be able to:

- Communicate, and defend, a substantive, contemporary and detailed knowledge of a specific area of nursing practice both orally and in writing to/with peers, the larger scholarly community and with society in general
- Lead, formulate and structure a long-duration, continuous work based project.
- Achieve designated advanced practice competences related to their work based function

Professional and academic

- Conduct nursing research on an international level and in an international context
- Initiate, formulate, structure, lead and evaluate the appropriateness of nursing science methods for research projects on an independent basis
- Demonstrate specialist nursing science understanding of cutting-edge theories and methods in nursing and related sciences at an international level
- Display responsibility in relation to own research (research ethics and governance)

A 'professional' doctorate graduate is able to:

- Conduct nursing projects in their field fully aware of the international application and relevance of the project.
- Evaluate the appropriateness of nursing science methods for clinically based projects on an independent basis
- Demonstrate and promote specialist nursing knowledge and practice derived from cutting-edge theories and methods in nursing. This knowledge should be adapted for the social and cultural context of practice.

- Display ethical and governance responsibility in relation to own research/work based practice (research and practical ethics)

Practical competences

- Plan and maintain academic and professional responsibility for complex tasks based on scientific nursing theories and/or skills and methods of research
- Make decisions supported by complex documentation/clinical evidence
- Critically analyse, evaluate and synthesise new and complex information that is relevant for professional/clinical practice, society and policy development
- Develop innovative approaches to nursing practice that are patient/client centred

Formal aspects

- **Admittance requirements:** Selected second cycle degree programmes with satisfactory performance or professional equivalence. (For professional doctorate and practical competences, this includes aptitude for person based discipline and ethical commitment and may include requirements for professional experience).
- **Length:** 180 ECTS - 240* ECTS credits to include professional competences where this is an option. In some countries the length of the programme has not been specified in terms of credits.
- **Further education options:** No degree-conferring further education options. Membership of learned societies and professional associations.

5.2 Generic Competences

In the first phase of Tuning a broad consultation was undertaken on the importance of 'generic competences' at the first cycle level. This consultation involved employers, students and academics, but not from within the nursing community. A four point scale, with 4 being the most important, was used with respect to the importance of the competences. When this survey was undertaken with nurse educators, the most distinguishing, but not surprising, feature was the marked first preference for the capacity to apply knowledge to practice as being the most important competence. The remaining competences were clustered in six groups with interchangeable ranking within the group. The second group comprised ethical commitment and the skills of analysis, synthesis, problem solving and interpersonal skills. The third group predominantly comprised skills relating to the capacities to learn, reflect, adapt and make decisions in an interdisciplinary context. The least important competence was knowledge of a second language, while skills associated with leadership, management, research and enterprise were found in the fifth and sixth groups. Notwithstanding these differences, the lowest score ranking was 2.9 (1-4) for three competences, while the rest were over 3, that is to say the majority of the competences were rated as being at least 'considerably' important.

The Tuning generic competences were modified in the light of feedback and the survey was repeated in 2008, this time involving the nursing stakeholders. The nursing responses once again demonstrated the importance of the generic competences concerning the ability to apply theory to practice and ethical commitment.

With respect to the **second cycle**, each competence gained in importance from the first cycle. In 2004 the most marked differences were in the fifth and sixth groupings, namely leadership, management, research where they have an increased importance at second cycle. Once again, these are not surprising findings and reflect the natural career progression of a registered nurse.

5.3 Subject Specific Competences

As we reported in 2008/2009, there was significant agreement concerning the subject specific competences. Country differences did not appear significant, tending to reflect cultural differences and the developmental stage of nursing within that country (for example knowledge of a second language and the ordering of research skills). In revising these competences, we have taken account of the prevailing demands in society, needs of the employment market and the impact of globalisation and technological developments in particular. The following subject specific competences are those expected of the first cycle graduate nurse at the point of registration. The competences are listed under the five dimensions of:

1. Professional values and the role of the nurse
2. Nursing practice and clinical decision making
3. Knowledge and cognition
4. Communication and interpersonal skills (including technology for communication)
5. Leadership, management and team working.

Our revisions of the BN competences include the following modifications to reflect contemporary practise and the EU Directive (2015/55/EU) changes.

- a) Additions:
 - a) Demonstrates the ability to respond to crisis/disasters in a professional manner
 - b) Domain 1: Demonstrates the ability to practice in a manner which demonstrates awareness and sensitivity towards different cultures, political and social realities
 - c) Domain 2: Demonstrates the ability to recognise the impact of global issues on health, and health and social care systems
- b) Amendments:
 - a) Competence 10: Needs to refer to the ability to recognise the specific needs associated with the concepts and situations of chronicity, co-morbidity and survivorship.
 - b) Competence 13 and 26: Needs to refer to the use of modern technologies in communicating with, and educating patients and relatives.
 - c) Competence 28: Needs to refer to the adaptability, flexibility and coping skills required for optimal care delivery in dynamic/transient health care systems/contexts, and in situations of uncertainty.
 - d) Competence 47: Needs to refer to the understanding of the influence and impact of economic and financial elements, in the organisation and delivery of care

The competences were edited to strengthen the statements and make them more explicit and outcome focussed. The full 2017 list of revised subject specific competences is located in Appendix 1. The competences were then mapped against the generic competences, which demonstrated once more that there is alignment.

The revised Masters level competences include modifications to reflect contemporary practise and the expansion of nurse specialists and advanced nurse practitioners. The practice-based competences are the major new addition. The full 2017 list of subject specific competences is located in Appendix 2

5.4 Civic, social and cultural engagement integrated into the nursing dimensions.

As articulated in the Assessment Framework, CALOHEE has developed a framework for Civic, social and cultural engagement. Within Nursing these elements have been incorporated as part of the key dimensions of the professional competence framework. In this table below, we demonstrate how the Civic, social and cultural competences are cross referenced explicitly within the Nursing Competence Framework.

Domain	Societies and cultures	Processes of information and communication	Processes of governance and decision making	Ethics, norms, values and professional standards
Professional values and the role of the nurse			X	X
Nursing practice and clinical decision making	X		X	
Knowledge and cognitive competencies	X		X	
Communication and interpersonal competencies	X	X	X	
Leadership, management and teamworking			X	

The challenge now faced by SAG2 is to consider the extent to which these various competences (generic, subject specific) can be measured so that appropriate and meaningful assessment strategies can be designed aligned to the competences. It is acknowledged that Programme and teaching strategies have an influence on assessment. We need to discern what are the key competences that provide the *minimal acceptable standard* that should apply to any nurse irrespective of country. Similarly, we need to identify the tasks linked to the competencies and their associated learning outcomes. This must be undertaken with respect to both theoretical and practice based competences. It is expected that the clinical learning experience for the general nurse complies with the Annex of the Directive.

6. Level descriptors for Nursing

1. Introduction

Section 5 has outlined in detail the background and development of the level descriptors for nursing. Here we summarise the level descriptors in the context of our five dimensions to demonstrate how it is necessary to align professional nursing practice with academic levels; the achievement of professional competence (from novice to expert); the acquisition of complex and complicated decision making skills; and technical/procedural practices. Conceptually any typology which separates knowledge artificially from skills and wider competences creates a misrepresentation of the artistry and nuances of professional practice. This is the legacy of a Cartesian approach to education and its analysis. Within a practice-based discipline, the practice of 'holistic and individualised/person-centred' nursing care requires the integration of all the domains of knowing, being and doing professional practice whether their origins are from the arts, sciences or ethical precepts associated with human persons (see Gobbi, 2005⁶).

2. The CALOHEE Framework of General Descriptors for Nursing

Here we summarise the main features of the Professional Nursing Dimensions according to the EQF levels. The dimensions incorporate the seminal works associated with the forms of knowing in nursing, namely empirics, aesthetics, ethics, personal knowledge (Carper, 1978⁷) socio-political knowing (White, 1995⁸) and emancipatory knowing (Chinn and Kramer, 2008⁹). They also take account of the developmental aspects of experiential learning (Steinaker and Bell, 1979¹⁰) and competence development (Benner, 1984¹¹).

Table 3
CALOHEE Framework: Level 6 NURSING with registration

Dimension	Knowledge	Skills	Wider Competences Responsibilities and Autonomy)
1. Professional values and the role of the nurse	The professional, moral, ethical and/or legal principles, dilemmas and issues in day to day practice.	The ability to respond appropriately and effectively to professional, moral, ethical and/or legal dilemmas and issues in day to day practice.	Within the scope of his/her professional practice and accountability, the ability to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate can challenge current systems to meet population/patient needs.
2. Nursing practice and clinical decision making	The principles, concepts, practices and procedures that underpin the practice and decision making of daily nursing practice.	The ability to make, and enact, clinical decisions within their Scope of Practice. The ability to fulfil the Scope of Practice articulated at national and European level. The ability to be a reflective practitioner.	Can reflect upon societal and population health and social needs, contributing as appropriate to policy making. Familiar with cultural competence. Has technical skills that can be utilised in the public space.

⁶Gobbi, M. Nursing Practice as Bricoleur activity: a concept explored. *Nursing Inquiry*, 12 (2) 117-125

⁷Carper, B. 1978. Fundamental Patterns of Knowing in Nursing. *Advances in Nursing Science*. 1 (1) 13-23

⁸White J. 1995. Patterns of Knowing: Review, critique, and update. *Advances in Nursing Science*. June. 17 (4) pp 73-86

⁹Chinn P.L. & Kramer M. 2008. *Integrated Theory and Knowledge Development in Nursing*, 7th edn. Mosby, St Louis, MI.

¹⁰Steinaker, N & Bell, R. 1979. *The experiential taxonomy: A new approach to teaching and learning*. Academic Press, London

¹¹Benner, P. 1984. *From novice to expert*. Addison-Wesley, Menlo Park, California,

3. Knowledge and cognitive competences	Nursing theories, knowledge and concepts of health, ill health, well being, The humanities, arts and sciences necessary to understand human behaviour, body functioning and adaptive responses in different cultures and contexts.	The ability to evaluate evidence and apply this evidence to individual clients, populations and cultures so as to deliver effective nursing care in a timely manner.	Aware of the impact of globalisation, particularly with respect to migration of staff and patients and their health and well being. Knows how to contribute in the public /civic space during emergency or disaster situations.
4. Communication and interpersonal competences	The art and science of communication in a range of circumstances with individuals, groups and populations in a digital age.	Communicating effectively with diverse peoples and abilities in a range of settings using appropriate media.	Can communicate with lay and professional groups with an appreciation of (P) political contexts.
5. Leadership and team working	From the perspective of a new registrant. Theories and models of leadership, followership, management and teams within health and social care contexts.	Able to lead and work collaboratively in clinical/health care teams. Able to supervise colleagues and junior staff.	Ability to work interculturally and interprofessionally with both lay and professional groups.

Table 4
CALOHEE Framework: Level 7 NURSING

Dimension	Knowledge	Skills	Wider Competences (Responsibilities and Autonomy)
1. Professional values and the role of the nurse	Within a global context, can identify future trends and challenges with respect to the professional, moral, ethical and/or legal principles, dilemmas and issues in day to day practice within a global context	Exhibits autonomy and leadership in the management and supervision of contemporary challenges in nursing and health care practice. Works at the boundaries of the Scope of Practice which may be extended to improve nursing care practises.	Critically contributes to the public health and civic agenda through an awareness of global, national and local trends.
2. Nursing practice and clinical decision making	From a systems and leadership perspective, appraises the principles, concepts, practises and procedures that underpin the practice and decision making of nursing practice .	Critically applies best available evidence to each decision and nursing action. Promotes client well-being in all situations. Can self-evaluate.	Can apply a range of nursing skills and decision making techniques within civic life.
3. Knowledge and cognitive competences	Specialist knowledge of the nursing theories, knowledge and concepts of health, ill health, well being, the humanities, arts and sciences necessary to understand human behaviour, body functioning and adaptive responses in different cultures and contexts.	Critically analyses and synthesises best available evidence to all divisions. Can use investigative tools to evaluate practise. Can initiate new practises to meet client needs.	Promotes and contributes evidence based guidelines, policies and knowledge in the civic sphere.
4. Communication and interpersonal competences	From a systems and leadership perspective, and in the context of specialist areas of practice: The art and science of communication in a range of challenging circumstances with individuals, groups and populations in a digital age.	Exhibits the ability to prevent, resolve and manage conflicts. Handles difficult conversations within an interprofessional environment (advocacy, whistle blowing, safeguarding). Effectively uses a range of communication skills.	Uses a range of communication technologies and strategies in their personal, public/civic and professional life. Skilled in reflective practice.
5. Leadership and team working	From a systems and leadership perspective, and in the context of specialist areas of practice: Theories and models of leadership, followership, management and teams within health and social care contexts	Leads uni and interdisciplinary teams in complicated and unpredictable situations. Initiates and innovates quality improvement programmes. Role models expertise and coaches /teaches others. Effectively uses resources.	Comprehends issues associated with leadership, management and team working within civic organisations. Plays a key role in epidemics, disaster or emergency situations.

8. Learning, Teaching and Assessment

8.1 Pedagogy

The SAG1 group demonstrated the range and diversity of pedagogies used in nurse education and articulated their relationship to the academic level, degree of autonomy and scope of practice of the individual nurse situated within their context of care. SAG2's survey similarly reflected this diversity with an increase in the use of student focussed pedagogues like peer review, 'flipped classroom', blended learning, role play/simulation. With the advent of Smart technologies and more accessible mobile internet facilities, nurse education now incorporates gaming, and other technologies for learning.

The notion of *differentiation* is crucial to nursing to enable development, progression and achievement of safe, intelligent practice in the world of patients and their families/loved ones. Many typologies of learning do not accord value to the role of apprenticeship, craft knowledge and skill acquisition that are often fundamental to learning in a person - based practice. Through our analysis of nursing in various European countries, there is a place for a variety of learning and teaching models in nurse education, these are used in different proportions according to the resources available and the developmental stage of the learner. Traditional models still have an important place in teaching/learning nursing for novices, or at the early stage of a more complex competence acquisition. These methods are relevant to the development of safe practice, for example learning moving and handling of patients and the ability to carry out procedures safely. What is now known as 'Craft knowledge' is often passed on from person to person, and it is appropriate to do so in workplaces where role modelling and coaching develop practices ahead of the evidence base. This applies to both novices and experts.

When human and material resources become available, innovative teaching and learning strategies are increasingly utilised. This includes the use of reflective and critical approaches to learning together with the use of informatics that support web based and work place learning. Practical skills are often developed through observation of practice, demonstrations, simulations, role play and exposure and engagement in clinical experiences. However, many countries reported the challenges encountered during clinical placements with student supervision and the quality of patient care. The reality is that when they become available, resources are allocated to support learners in practice, to prepare students for practice through clinically based wards, clinical skills laboratories and increasingly use simulations or virtual practice. We agree with the SAG1 group and their collaborating stakeholders who considered it unsatisfactory, and potentially hazardous to patients, when student nurses are inadequately supported in the clinical learning environment. Students require support from suitably qualified registered nurses who have been specially prepared to help students learn and achieve their practical and professional competences in the workplace. Employer and financial commitment is essential to enable the registered nurses to attend continuing education so they can be equipped to teach, supervise and assess students in practice. Ideally, students should be supplementary to the workplace and therefore facilitated to observe care; practice under supervision, receive feedback on their performance and have sufficient learning opportunities to develop the necessary competences. Students should have experience that reflects the challenging needs of increasingly diverse health and social care settings.

The way that curricula are developed is not only cultural, but in nursing also reflects the stage of development of nursing within that country and where it is situated and controlled. In some countries curricula are legislated, in others learning outcomes are nationally defined and in others, no requirements beyond conformity to the EU Directive are set. Curriculum expression reflects also the curriculum design, resources available

and teacher/student capabilities. Assessment strategies in nursing at first cycle with registration need to address both theoretical and practical based learning as identified in the subject specific competences in the original Tuning project. The thesis or special project required in the first cycle assesses generic competencies. Diverse strategies are used to reflect the assessment of knowledge, skills, attributes and professional values. A variety of assessment strategies should be utilised to reflect the diversity of teaching and learning approaches used across the EU countries. In the interests of public safety, each programme will identify core components that must be 'passed' in order to achieve the necessary licence/registration to practice.

Table 5
An example of learning, teaching and assessing strategies to achieve a nursing competence relevant to the subject area

Competence to be achieved at the end of the course. <i>What does this competence mean for students?</i>	Potential learning outcomes (LO) found in units/modules during the course to achieve the competence. Placed in order of increasing complexity. (Ability to...)	Possible learning and teaching strategies/ methods/ pedagogies. <i>How are students helped to acquire this competence?</i>	How do you assess whether, or to what degree they have achieved this competence (progression)? <i>How do students know whether, or to what degree they have achieved this competence and if not why they have not achieved it?</i>
<p>Can practice within the context of professional, ethical, regulatory and legal codes, recognising and responding to moral/ethical dilemmas and issues in day to day practice.</p> <p>Is aware of the different roles, responsibilities and functions of a nurse.</p> <p><i>The student can fully realise what it means to be a registered nurse, and to carry out the duties, responsibilities and practices that are associated with this role within the health care team and society.</i></p>	<p>Demonstrate an understanding of nursing as a subject/science and as a profession.</p> <p>Explain and demonstrate the legal and ethical responsibilities of a registered nurse and other health care workers.</p> <p>Apply knowledge of the relevant Acts to the patients' legal rights.</p> <p>Apply knowledge of the relevant Acts and policies to the patient as a citizen and their rights and duties in financial and social matters.</p> <p>Explain and practice according to the legal and ethical codex for nurses. Updates knowledge in this field.</p>	<p>Lectures or e-learning packages to introduce the topic.</p> <p>Guided reading of ethical concepts and application, codes of practice.</p> <p>Videos and analysis of critical incidents.</p> <p>Discussions and debates focused in practice examples: professional/ ethical dilemmas in practice.</p> <p>Role play and simulation exercises.</p> <p>Group work.</p> <p>Presenting in plenary sessions.</p> <p>Supervised clinical practical experience in different health and social care settings.</p>	<p>This competence would be assessed throughout the course both theoretically and practically.</p> <p>It is common to have specific assessment criteria related to this competence. Persistent failure to achieve this competence is usually very serious.</p> <p>This competence would be assessed directly and also indirectly through inferences made in others. It covers several generic competences for example ethical commitment.</p> <p>Feedback from academic assessments would guide the student towards their theoretical understanding and application to practice. The style of theoretical assessments would be scrutinised for evidence of understanding and applying these.</p> <p>Feedback from clinical practical assessments would indicate level of achievement (often through portfolios, structured assessments and clinical reports from practising nurses).</p>

	Awareness of the intentions in general legislation as it applies to the nursing context.	Increasing responsibility in practice.	
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8.2 Quality Enhancement

Quality enhancement in nursing addresses theoretical and clinical, practical or work-based learning, to enable the student to meet the aims and outcomes of the curriculum. The current situation relating to the roles and respective accountability for the quality of the clinical learning environment are outlined on the web site where a table demonstrates the complex stakeholder involvements in student learning in practice and the role of competent authorities. In some countries, there are now mandatory requirements for **learning and development** after registration: these are often associated with revalidation requirements for the licence renewal. There are also countries with specified competences or expectations associated with advanced or specialist nurse practitioner roles.

There is significant evidence to confirm that quality in the clinical learning environment is related to how students are treated (humanistic or not), team spirit, leadership and management style of the senior clinician and available support for teaching and learning. Audits of clinical learning environments may be undertaken by the educational provider, regulatory bodies or quality assurance agencies. In these situations it is typical for the following items to be considered:

- Number, experience, qualifications and mix of clinical staff
- Motivation of staff
- Research or evidence base of clinical practice
- Patient/staff ratios
- Relationship between educationalists and clinicians
- Philosophy of nursing care
- Learning opportunities and supervision
- Development of staff
- Quality of patient care

These elements augment those previously identified issues within the TUNING methodology for quality enhancement and can be applied to other similar work based learning programmes. They also indicate the dilemma faced by Higher Education Institutions who may have limited control over the clinical environment where their students are placed. The involvement of stakeholders in quality enhancement is therefore crucial. This is achieved through partnership and finance arrangements, staff development, audit, action plans, and feedback from students, external agencies and academic staff.

In the overview to this brochure, it was acknowledged that countries are at different stages of development with respect to the nursing profession and the education of its members. Similarly, resource allocation is variable. In the transition from content based, input led curricula to competence based, ECTS and Qualifications Framework compatible curricula, staff and students continue to need development. Such a transition will also affect non nursing personnel in Higher Education and Health Care settings (for example academic registrars, medical staff, administration systems). There will be an associated additional workload to achieve a quality based and rigorous 'new model' of nurse education. In some countries this will stretch already overworked facilities. We support the view of our stakeholders that the development of tools to enable countries to make

impact assessments would be a helpful way forward. This impact assessment should take into account the impact upon university and non-university sectors, the availability of academic and practice staff to support learners and the capacity (in terms of resources) to transfer significant numbers of students to degree programmes and to provide post registration opportunities with recognizable qualifications.

9. Some Reflections on the Post Graduate Cycles

Before discussing the doctoral context, it is important to consider the current second cycle situation (masters' level) in nursing and nursing science in Europe. With the expansion of graduate status in many countries, second cycle education is witnessing rapid expansion within the economic constraints of the countries concerned and the availability of academic and clinical lecturers/supervisors in nursing. The current situation in second cycle programmes at Universities in the Tuning countries can be grouped into types, which are (1) a theoretical type (e.g. nursing science) and (2) a clinical type (e.g. Advanced Nurse Practitioner, Nurse Specialist). The development of the second cycle programmes is an essential platform for the achievement of a valid and sufficient research capacity at doctoral and post-doctoral level.

The student is usually supported through **supervision** (academic and/or clinical) particularly if there is a special project or dissertation or required clinical experience. The **assessment strategy** uniformly comprised a mixture of different methods, e.g. as VIVA, thesis, examination, projects or by credits in a modular system. A thesis is compulsory for all countries. After passing the assessments and gaining the qualification, graduates work as a lecturer, teacher in practice and/or theory, clinical specialist/advanced nurse practitioner, a researcher or have a function in the management or policy area.

9.1 Third Cycle Education

While as, Meleis pointed out over a decade ago, doctoral education in nursing is fairly recent when compared with other traditional disciplines (Meleis in Ketefian and McKenna, 2005), doctoral education *in* nursing is now prevalent in more countries than 2008/9.

The current situation in third cycle programmes at Universities in the Tuning countries can be grouped in three categories, namely (1) Countries with PhD in nursing or nursing science; (2) countries with a clinical or a taught doctorate in nursing; and. (3) countries with no third cycle education in nursing in their own country. In the latter situation doctoral students have to continue their education in countries with a PhD in nursing or – as it was the case in the beginning of nursing science in all countries – continue their studies in their own country in related disciplines i.e. social science, public health, anthropology, education, philosophy etc. The ability to supervise nursing as a discipline in its own right can thus be enriched or hindered by the expertise and experience of the supervisor with respect to nursing practice and theory. The dominance of 'out of discipline' influences upon the study of nursing theory and practice is well documented. There is also a variation in the countries with a third cycle nursing/nursing science programme. In some countries the main subject can be nursing science when in others it (is) could be nurse education, epidemiology or public health. This echoes earlier comments where nurses may or may not be supervised by academics who are themselves nurses, or academically qualified in the theory or practice of nursing.

Admission criteria for the 3rd cycle studies in nursing/nursing science is mainly through the successful completion of a 2nd cycle degree, with the exception of Germany, where students currently have to complete four years of study after their academic diploma RN. In the UK a good first cycle degree may give direct access to doctoral studies, although masters level achievement is preferred. The current situation can be defined as a transitional period, meaning that clinical work experience and studies are differently valued in the participating countries, also reflecting the role and scope of practice of nurses. Where this transition period is being supported by the recognition of prior learning, sometimes exemptions are given on the basis of competences/learning demonstrated from work experience and studies. There may be additional requirements,

especially for the professional/clinical doctorates where specified academic/clinical competences may be necessary.

The normal length of the third cycle education is specified in some countries (e.g. three years) while in others, like Finland it is completed with 60 ECTS credits (worth) of advanced studies or doctoral courses in addition to the thesis. The more recent Clinical or Professional doctorate programmes usually have credit allocations that reflect three years full time study according to the respective National Qualification Framework (e.g. UK). They can also include credit for the achievement of clinically or work related competences at this level. The Tuning members considered that there was merit to the research training programme having a specific credit allocation for demonstration of the generic research skills training competences. It was less clear how to allocate credit for the research output or practice competences.

Assessment

A variety of assessment strategies is used for the empirical traditional 3rd cycle PhD. These include, thesis, publication (which might be part of the thesis), a thesis defence or viva, examinations, and/or a project (from proposal development to defence), and doctoral courses. Within the professional doctorate, there may be project work, assignments and the development of a portfolio of competence in the work related activities. Peer assessment, presentations at international conferences or poster work may be expectations of the doctoral student/candidate during the course of their studies.

Research, Learning and Supervision environment.

Currently, the majority of the countries in SAG2 now offer third cycle education in nursing/nursing science, whereas in 2008 only eight out of fourteen countries had nursing studies at doctoral level. In some countries, only one or two universities offer the programme, while in others, all or several research active universities have established nursing departments or units. There is no doubt that a good supervisory relationship situated in a research active environment is crucial to the support and achievement of the doctoral students. With the professional/clinical doctorate students, it is essential that this is also complemented by a supportive working environment to enable the student to have access to the learning opportunities that will enable them to achieve the necessary work/clinically based outcomes.

9.2. Trends and Concerns

It has been previously noted that Nursing is an emerging academic discipline, particularly vulnerable to socio economic constraints due to its personnel costs and relationships with the Health Sector and medicine. In order to expand post graduate education and research outputs in nursing, a greater research capacity is required which itself is reliant on sufficient post-doctoral scholars. The challenge remains to provide sufficient and robust second and third cycle programmes, research active environments and sufficient quality supervisors who are themselves research active. A major concern is the paucity of funding, whether at national or international level, to support doctoral education for nurses *in nursing* and more crucially, to develop sufficient research capacity in the field of nursing. This is in direct contrast to nurse researchers and academics being viewed as 'research assistants or adjuncts' to medicine or bioscience. Another concern is the lack of research funding assigned to nursing research or nursing related issues that are of practical relevance to patients, clients and their families. For example, current and predicted epidemiological demands associated with longevity suggest the need for research into challenging and enduring care issues like dementia, rehabilitation, continence, immobility and the best utilisation of the nursing workforce for optimal public health and quality of life. The contribution of nurses to the social, educational and economic development of Europe cannot be underestimated given the well-known

demographic and migration patterns in Europe, and the role of women who form the largest proportion of the nursing workforce. Fortunately, the recent 7th and 8th Framework Research Programmes have supported significant nursing research programmes.

Developing robust third cycle and research programmes in nursing is crucial. If nurses are to be significant international research collaborators and politically represented at leadership and policy making levels in the fields of health and social care. Post-doctoral research fellowships, specialist training and 'emerging researcher' funding streams specifically designated or 'ring fenced' for the discipline are also necessary. They are noticeably absent in most countries. When there is an absent experienced academic/researcher nursing 'voice' in multidisciplinary research, public health and policy making, the development of national/European policy and the best use of public monies is impoverished.

Third cycle education, whether funded by the individual or sponsored fully or partially by employers/government agencies is expensive, particularly if senior practitioners or educators require salary protection during their study period. It is therefore important that career opportunities and structures enable the best utilisation of graduate achievements and enable further development of the profession in a scientific, robust and evidence based practice manner. International co-operation, exchange visits and multilevel institutional and research collaborations would enable higher education institutions to share their expertise and build the research capacity in nursing practice and theory.

There are growing international networks of nurse researchers and associations concerned with doctoral education and research. For example: the International Network for Doctoral Education in Nursing- <http://www.umich.edu/~inden/> provides information on quality standards for doctoral education and ways of collaborating internationally. Koff (2016) provides a useful overview of Nursing in the European Union, building on the earlier work of Ketefian and McKenna (2005) who provided an early comprehensive global overview of doctoral education in nursing that offers substantive data in this area.

10. Other Useful Links and Information about our Key Stakeholders

The SAG1 and SAG2 members received significant support and encouragement from the European stakeholders and offer their sincere thanks for their contribution to the current and future Tuning outcomes.

EFN The European Federation of Nurses Associations (EFN), former Standing Committee of Nurses of the EU (PCN), was established in 1971, to represent the nursing profession and its interests to the European Institutions, based on the nursing education and free movement Directives being drafted by the European Commission then, and is the independent voice of the nursing profession, representing more than one million nurses at European Level. EFN members are drawn from the National Nurses Associations from the twenty-seven EU Member States (+ Croatia, Norway, Iceland and Switzerland), which are in membership with the International Council of Nurses (ICN) and the Council of Europe, and its Associated members are three mandated representatives of the European Nursing Specialist and Generic Organisations. The International Council of Nurses (ICN), the World Health Organisation (WHO) and the European Nursing Students Association (ENSA) are holding observer status within EFN General Assembly. www.efnweb.org The mission of EFN is to safeguard the status and practice of the profession of nursing and the interests of nurses in the EU and Europe. *Clos du Parnasse, 11A - B-1050 Brussels – Belgium*

FEPI European Council of Nursing Regulators (FEPI- Federazione Europea Professioni Infermieristiche). FEPI is a new European network of nursing regulators which is working together to influence EU policy development and provide advocacy for nursing regulation. It also provides a platform for the exchange of information among regulatory bodies and competent authorities for nursing. FEPI's mission is patient safety and public protection through high nursing standards for education and practice and thus the protection of the European citizens. www.fepi.org *FEPI c/o IPASVI, Coudenberg 70, Brussels 1000, Belgium*

FINE European Federation of Nurse Educators- was established in 1995 and its objective is to promote the continuing development of excellence in nursing education in Europe. *C/o CEFIEC - 6, rue Jean Jaures - 94 190 Villeneuve St Georges – France* <http://www.fine-europe.eu>

IDEN the International Network for Doctoral Education in Nursing- <http://www.umich.edu/~inden/>

ENDA The European Nurse Directors Association was established in 1995 in order to support nursing leadership. The key aims for the Association are to strengthen the nursing contribution to policy making in the context of healthcare management in Europe, to further the development of the art and science of nursing leadership and management in Europe and to establish formal links between Nurse Directors across Europe to support a communication network of experts. www.eu-nurse-leaders.org Prof. J Wilkins. Hon President. Woodside Mill, West Woodside, Wigton. CA7 OLW UK. Email jacquifilkins@hotmail.com

ICN The International Council of Nurses is a federation of 129 national nurses associations representing the millions of nurses worldwide. ICN is the international voice of nursing and works to ensure quality for all and sound health policies globally. *Web: www.icn.ch 3, Place Jean Marteau - 1201 - Geneva – Switzerland.*

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Appendixes

Appendix 1A 2017 Subject specific competences- Bachelors level with registration

Please note the use of the term 'patient' as the inclusive term.

Competences 2017	
Dimension 1: The professional values and the role of the nurse associated competences	
1)	Practices within the context of professional, ethical, regulatory and legal codes, recognising and responding to moral/ethical dilemmas and issues in day to day practice.
2)	Practices in a holistic, tolerant, non-judgmental, caring and sensitive manner, ensuring that the rights, beliefs and wishes of different individuals and groups are not compromised.
3)	Educates, facilitates, supports, promotes and encourages the health, well-being and comfort of populations, communities, groups, families and individuals whose lives are affected by ill health, distress, disease, disability or death.
4)	Within the scope of his/her professional practice and accountability, is aware of the different roles, responsibilities and functions of a nurse, and is able to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate is able to challenge current systems to meet population/patient needs.
5)	Accepts responsibility for his/her own professional development and learning, using evaluation as a way to reflect and improve upon on his/her performance and to enhance the quality of service delivery.
6)	Is able to justify and articulate the relevant theoretical and research underpinnings to their professional practice
Dimension 2: Nursing practice and clinical decision making competences.	
7)	Undertakes comprehensive and systematic assessments using the tools/frameworks appropriate to the patient taking into account relevant physical, social, cultural, psychological, spiritual and environment factors.
8)	Able to undertake an effective risk assessment and take appropriate actions
9)	Able to recognise and interpret signs of normal and changing health/ill health, distress, or disability in the person (assessment/diagnosis).
10)	Responds to patient needs by planning, delivering and evaluating appropriate and individualised programmes of care working in partnership with the patient, their carers, families and other health/social workers.
11)	Able to critically question, evaluate, interpret and synthesis a range of information and data sources to facilitate patient choice, and to make sound clinical judgments to ensure quality standards are met and practice is evidence based.
12)	Able to use modern technologies to assess and respond appropriately to client need (for example through telenursing, multimedia and web based resources)
13)	Able to appropriately use a range of nursing skills, medical devices, interventions/activities to provide optimum care. For example: <ol style="list-style-type: none"> a) maintains patient dignity, privacy and confidentiality; b) practise principles of health and safety, including moving and handling, infection control; essential first aid and emergency procedures; c) safely administers medicines and other therapies; d) considers emotional, physical and personal care, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life;

<p>e) responds to individuals needs through the life span and health/illness experience e.g. pain, life choices, revalidation, invalidity or when dying;</p> <p>f) informs, educates and supervise patient/carers and their families.</p>
<p>Dimension 3: Knowledge and cognitive competences</p>
<p>14) Has current and relevant knowledge of the following and can appropriately apply this knowledge to nursing practice, patient care and situations of uncertainty:</p> <p>a) Theories of nursing and nursing practice b) Theories and views concerning the nature and challenges of Professional practice c) Natural and life sciences d) Social, health and behavioural sciences e) Ethics, law and humanities f) Technology and health care informatics g) International and national policies h) Problem solving, decision making and managing tension or conflict i) Theories of personal and professional development</p>
<p>15) To have sufficient knowledge of the Research Process and current nursing research, so as to be able to apply this knowledge to clinical practice and other nursing activities and therefore provide nursing care which is rigorous and evidence based.</p>
<p>Dimension 4: Communication and interpersonal competences (including technology for communication)</p>
<p>16) Able to communicate effectively (including the use of new technologies): with patients, families and social groups, including those with communication difficulties.</p>
<p>17) Enables patients and their carers to express their concerns and worries and can respond appropriately e.g. emotional, social, psychological, spiritual or physical.</p>
<p>18) Able to appropriately represent the patient's perspective and act to prevent abuse.</p>
<p>19) Can use a range of communication techniques to promote patient well-being. For example the ability to appropriately:</p> <p>a) use counselling skills; b) identify and manage challenging behaviour; c) recognise and manage anxiety, stress and depression; d) give emotional support and identify when specialist counselling or other interventions are needed e) identify opportunities for health promotion and health education activities</p>
<p>20) Able to accurately report, record, document and refer care using appropriate technologies.</p>
<p>Dimension 5: Leadership, management and team competences</p>
<p>21) Realises that patient well-being is achieved through the combined resources and collaborative actions of all members of the health/social care team, and is able to lead and co-ordinate a team, delegating care appropriately and meaningfully.</p>
<p>22) Able to work and communicate collaboratively and effectively with other nurses in the best interests of the patient</p>
<p>23) Able to work and communicate collaboratively and effectively with other members of the interprofessional team in the best interests of the patient.</p>
<p>24) Able to work and communicate collaboratively and effectively with all support staff to prioritise and manage time effectively while quality standards are met.</p>
<p>25) Able to assess risk and actively promote the well-being, security and safety of all people in the working environment (including themselves).</p>
<p>26) Critically uses tools to evaluate and audit care according to relevant quality standards.</p>
<p>27) Within the clinical context, demonstrates the ability to educate, facilitate, supervise and support nursing students and other health/social care students / workers.</p>
<p>28) Is aware of the principles of health/social care funding and uses resources effectively</p>

Appendix 1B – 2018 Subject specific competences: Masters Level including practice based competences

Please note the use of the term 'patient' as an inclusive term.

2018 Competences
Dimension 1: The professional values and the role of the nurse associated competences
1. Demonstrates the ability to practise within the context of professional, ethical, regulatory and legal codes, recognising and responding to moral/ethical dilemmas and issues in daily practice and the public space.
2. Demonstrates the ability to practise in a holistic, tolerant, non-judgmental, caring and sensitive manner, ensuring that the rights, beliefs and wishes of different individuals and groups are not compromised.
3. Demonstrates the ability to educate, facilitate, promote, support and encourage the health, wellbeing and comfort of populations, communities, groups and individuals whose lives are affected by, ill death, distress, disease, disability or death.
4. Demonstrates advanced understanding of the different roles, responsibilities and functions of a nurse, and is able to evaluate and, if appropriate, adjust their role to respond effectively to population/patient needs within the scope of his/her professional practice and accountability.
5. Demonstrates the ability to accept responsibility for his/her own professional development and learning, using evaluation as a way to reflect and improve upon his/her performance to enhance the quality of service delivery and patient outcomes.
6. Demonstrates the ability to critically evaluate the appropriateness of various methods of analysis and complex issues in nursing and nursing science from an academic and advanced professional nursing perspective
7. Demonstrates specialist understanding that extends academic and professional knowledge and competences gained through Bachelor degree
8. Demonstrates comprehensive understanding of research work in nursing science and therefore be capable of participating in research.
9. Demonstrates practical insight into the implications and applications of research and evidence based practice to underpin practice for patient benefit (research ethics, governance, audit).
Dimension 2: Nursing practice and clinical decision making competences
10. Demonstrates the ability to undertake advanced and systematic assessments using the tools/frameworks appropriate to the patient taking into account relevant physical, social, cultural, psychological, spiritual and environment factors.
11. Demonstrates the ability to initiate, complete and/or supervise an effective risk assessment and take appropriate actions safely and efficiently at an advanced level.
12. Demonstrates the ability to recognise and interpret signs of normal and changing health/ill health, distress, or disability in the person (assessment/diagnosis) and take appropriate action safely and efficiently.
13. Demonstrates the ability to manage patient needs by planning, delivering and evaluating appropriate and individualised programmes of care working in partnership with the patient, their carers, families and other health/social care professionals.
14. Demonstrates the ability to critically question, evaluate, interpret and synthesise complex information and data sources to facilitate patient choice.
15. Demonstrates the ability to make evidence based clinical judgements to ensure optimum care and outcomes for patients

16. Demonstrates the ability to use modern technologies to assess, manage and respond appropriately to patient need (for example through telenursing, multimedia and web resources).
17. Demonstrates the ability to use effectively and efficiently a range of nurse skills, medical devices and interventions/activities to ensure optimum care and outcomes for patients.
18. Demonstrates the ability to maintain and promote patient dignity, advocacy and confidentiality, using nursing skills, medical devices and interventions/activities to provide optimum patient care,
19. Demonstrates the ability to practice and promote principles of health and safety for self and others to ensure optimum care, including moving and handling, infection control; essential first aid and emergency procedures,
20. Demonstrates the ability to safely administer medicines and other therapies effectively.
21. Demonstrates the ability to assess and manage the emotional, physical and personal care needs of patients, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life.
22. Demonstrates the ability to assess and manage patient need throughout the life span and health/illness experience e.g. pain, life choices, revalidation, invalidity or when dying.
23. Demonstrates the ability to inform, educate and supervise patient/carers and their families to ensure optimum care and outcomes.
24. Demonstrates the ability to make and justify decisions reflecting on social and ethical responsibilities as well as nursing and nursing science issues and, where appropriate, carry out analysis that results in an adequate basis for decision-making
25. Demonstrates the ability to comprehend, analyse and evaluate development work based on scholarly, theoretical and / or experimental methods in nursing and nursing science

Dimension 3: Knowledge and cognitive competences

27. Demonstrates advanced knowledge and understanding of the theories of nursing and nursing science that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
28. Demonstrates advanced knowledge and understanding of theories concerning the nature and challenge of professional practice that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
29. Demonstrates the ability to analyse, synthesise and evaluate the natural and life sciences that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
30. Demonstrates the ability to analyse, synthesise and evaluate the social, health and behavioural sciences that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
31. Demonstrates advanced knowledge and understanding of ethical theory, law and humanities that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
32. Demonstrates the ability to analyse, synthesise and evaluate use of technology and health care informatics that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
33. Demonstrates advanced knowledge and understanding of international and national policies that can be appropriately applied to nursing practice, patient care and situations of uncertainty.

34. Demonstrates the ability to analyse, synthesise and evaluate advanced knowledge and understanding of problem solving, decision making and conflict theories that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
35. Demonstrates advanced knowledge and understanding of theories related to personal and professional development to enhance own professional practice.
36. Demonstrates advanced knowledge and understanding of the research process and current nursing research that can be appropriately applied to nursing practice, patient care and situations of uncertainty.
37. Demonstrates the ability to communicate complex professional and academic issues in nursing and nursing science to both specialists and lay people in a clear and unambiguous manner.
38. Demonstrates the ability to formulate and analyse complex scholarly issues in nursing and nursing science independently, systematically and critically in the relevant specialisation
39. Demonstrates the ability to continue own competency development and specialisation in a manner that may be largely self-directed or autonomous
Dimension 4: Communication and interpersonal competences (including technology for communication)
40. Demonstrates the ability to communicate effectively (including the use of new technologies) with patients, families and social groups, including those with communication difficulties to ensure optimum care and outcomes for patients.
41. Demonstrates the ability to enable patients and their carers to express their concerns and worries and respond appropriately and collaboratively (e.g. emotional, social, psychological, spiritual or physical worries) to ensure optimum care and outcomes for patients.
42. Demonstrates the ability to appropriately identify and represent the patient's perspective and act to prevent abuse to ensure optimum care and outcomes for patients.
43. Demonstrates the ability to appropriately use advanced counselling skills to promote patient wellbeing to ensure optimum care and outcomes for patients.
44. Demonstrates the ability to identify and manage challenging behaviour (using advanced communication techniques to promote patient wellbeing) to ensure optimum care and outcomes for patients.
45. Demonstrates the ability to recognise and manage appropriately anxiety, stress and depression (using advanced communication techniques to promote patient wellbeing) to ensure optimum care and outcomes for patients.
46. Demonstrates the ability to give effective emotional support and identify when specialist counselling or other interventions are needed to ensure optimum care and outcomes for patients.
47. Demonstrates the ability to identify and use opportunities for health promotion and health education activities at an advanced level to ensure optimum outcomes for patients.
48. Demonstrates the ability to accurately report, record and document care using appropriate advanced technologies and make referrals when needed to ensure optimum care and outcomes for patients.
Dimension 5: Leadership, management and team competences
49. Demonstrates the ability to collaborate effectively with all members of the health/social care team to ensure optimum care and outcomes for patients.
50. Demonstrates the ability to lead and co-ordinate team, delegating appropriately and meaningfully to ensure optimum care and outcomes for patients.

51. Demonstrates the ability to work, influence and communicate collaboratively and effectively with other nurses, health professionals, policy makers, and other actors in the public space, to ensure optimum care and outcomes for patients.
52. Demonstrates ability to work and communicate collaboratively with all support staff to manage resources effectively while maintaining quality standards to ensure optimum care and outcomes for patients.
53. Demonstrates the ability to assess risk and actively promote the well-being, security and safety of all people in the working environment (including themselves).
54. Demonstrates the ability to critically assess, develops and use tools to evaluate and audit care according to relevant clinical guidelines and quality standards.
55. Demonstrates the ability to educate, facilitate, supervise and support nursing students and other health/social care students or workers in the clinical environment.
56. Demonstrates the ability to apply and influence of health/social care funding streams and use resources effectively.

Appendix 3: Relevant Changes from Directive 2005/36/EC to 2013/55/EC (items in bold)

(18) Directive 2005/36/EC should, through the introduction of common training principles, promote a more automatic character of recognition of professional qualifications for those professions which do not currently benefit from it. This should take account of the competence of Member States to decide the professional qualifications required for the pursuit of professions in their territory as well as the contents and the organisation of their systems of education and training. **Common training principles** should take the form of common **training frameworks based on a common set of knowledge, skills and competences** or **common training tests**. **It should be possible for common training frameworks also to cover specialties that currently do not benefit from automatic recognition provisions under Directive 2005/36/EC and that relate to professions encompassed by Chapter III of Title III and that have clearly defined specific activities reserved to them. Common training frameworks on such specialties, in particular medical specialties, should offer a high level of public health and patient safety.**

22) Article 31 is amended as follows:

(a) paragraph 1 is replaced by the following:

“1. Admission to training for nurses responsible for general care shall be contingent upon **either:**

(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.**”;

(c) in paragraph 3, the first subparagraph is replaced by the following: **“The training of nurses responsible for general care shall comprise a total of at least three years of study, which may in addition be expressed with the equivalent ECTS credits, and shall consist of at least 4 600 hours of theoretical and clinical training, the duration of the theoretical training representing at least one third and the duration of the clinical training at least one half of the minimum duration of the training. Member States may grant partial exemptions to professionals who have received part of their training on courses which are of at least an equivalent level.”;**

(ca) **paragraph 4 is replaced by the following:**

“4. Theoretical education is that part of nurse training from which trainee nurses acquire the professional knowledge, skills and competences required under paragraphs 6 and 7. The training shall be given by teachers of nursing care and by other competent persons, at universities, higher education institutions of a level recognised as equivalent or at vocational

- schools or through vocational training programmes for nursing.”;*
- (cb) *in paragraph 5, the first subparagraph is replaced by the following:*
- “5. Clinical training is that part of nurse training in which trainee nurses learn, as part of a team and in direct contact with a healthy or sick individual and/or community, to organise, dispense and evaluate the required comprehensive nursing care, on the basis of the knowledge, skills and competences which they have acquired. The trainee nurse shall learn not only how to work in a team, but also how to lead a team and organise overall nursing care, including health education for individuals and small groups, within health institutes or in the community.”;*
- (cc) *paragraph 6 is replaced by the following:*
- “6. Training for nurses responsible for general care shall provide an assurance that the professional in question has acquired the following knowledge and skills:*
- (a) comprehensive knowledge of the sciences on which general nursing is based, including sufficient understanding of the structure, physiological functions and behaviour of healthy and sick persons, and of the relationship between the state of health and the physical and social environment of the human being;*
 - (b) knowledge of the nature and ethics of the profession and of the general principles of health and nursing;*
 - (c) adequate clinical experience; such experience, which should be selected for its training value, should be gained under the supervision of qualified nursing staff and in places where the number of qualified staff and equipment are appropriate for the nursing care of the patient; (d) the ability to participate in the practical training of health personnel and experience of working with such personnel;*
 - (e) experience of working together with members of other professions in the health sector.”;*
- (d) *the following paragraph is added:*
- “7. Formal qualifications as a nurse responsible for general care shall provide evidence that the professional in question is able to apply at least the following competences regardless of whether the training took place at universities, higher education institutions of a level recognised as equivalent or at vocational schools or through vocational training programmes for nursing:*
- (a) competence to independently diagnose the nursing care required using current theoretical and clinical knowledge and to plan, organise and implement nursing care when treating patients on the basis of the knowledge and skills acquired in accordance with points (a), (b) and (c) of paragraph 6 in order to improve professional practice;*
 - (b) competence to work together effectively with other actors in the health sector, including participation in the practical training of health personnel on the basis of the knowledge and skills acquired in accordance with points (d) and (e) of paragraph 6;*

- (c) competence to empower individuals, families and groups towards healthy lifestyles and self-care on the basis of the knowledge and skills acquired in accordance with points (a) and (b) of paragraph 6;***
- (d) competence to independently initiate life-preserving immediate measures and to carry out measures in crises and disaster situations;***
- (e) competence to independently give advice to, instruct and support persons needing care and their attachment figures;***
- (f) competence to independently assure the quality of, and to evaluate, nursing care;***
- (g) competence to comprehensively communicate professionally and to cooperate with members of other professions in the health sector;***
- (h) competence to analyse the care quality to improve his own professional practice as a nurse responsible for general care."***

Appendix 4. List of the first Subject Area Group for Nursing (SAG1)

The working group was co-ordinated by Mary Gobbi, who has edited the brochure. The SAG members below have all contributed to the construction of the brochure 1st edition.

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