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Title: Establishing Pan-European Leadership Academy for Postdoctoral Nurses to Impact Health Care

Acronym: EuroNurseLead

Summary

Nurse leaders are needed to ensure that the distinctive nursing perspective is included in decision-making in global health care. The World Health Organization in the State of the Worlds Nursing Report called for governments to invest in nursing education, jobs, and leadership to strengthen nursing for the purpose of improving health for all. Nurses are seriously underrepresented in leadership in health care at all levels in individual countries and at the European level. This is obvious in current decision making around the Covid-19 pandemic where governments depend on frontline nurses to deliver essential patient care. Postdoctoral nurses, the experts in the field of research and evidence based practice, lack career perspectives and have very limited access to decision-making positions to make positive changes. Postdoctoral nurses need enhanced strategic leadership skills to enable them to actualise their expertise in health care so that they are able to operate effectively at all levels in organisations within and across countries.

Through this Cost Action: Establishing Pan-European Leadership Academy for Postdoctoral Nurses to impact health care, -we bring together nurse leaders, scientists, health care professionals and stakeholder across European countries and beyond to explore ways to strengthen the leadership and position of postdoctoral nurses, enabling them to positively influence European health care and policy at all levels. This would lead improved and more cost effective care for patients and families across Europe. The current consortium includes 22 Cost countries, 10 Inclusiveness Target Countries, 2 International partners and 4 international organization have confirmed participation.

Key Expertise needed for evaluation

Health Sciences

Nursing

Keywords

Nursing Science

Postdoctoral Nurses

Leadership development

Academic and professional development

Health care Improvement

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TECHNICAL ANNEX

1 S&T EXCELLENCE

1.1 SOUNDNESS OF THE CHALLENGE

1.1.1 DESCRIPTION OF THE STATE-OF-THE-ART

Nurse leaders are needed to ensure that the distinctive nursing perspective is included in decision-making in global health care. The World Health Organization in the State of the Worlds Nursing Report called for governments to invest in nursing education, jobs, and leadership to strengthen nursing for the purpose of improving health for all. Nurses are seriously underrepresented in leadership in health care at all levels in individual countries and at the European level. This is obvious in current decision making around the Covid-19 pandemic where organizations and governments depend on frontline nurses to deliver essential patient care, - yet nurses are not involved in policy and decision making. The distinctive nursing perspective on healthcare and availability of the nursing workforce are also indispensable in management of chronic diseases and global megatrends like population growth. Education plays a key role in shaping the leadership, knowledge and competencies of nurses, which should align with population needs. The Bologna three cycle educational system was introduced in Europe in 1999 with a bachelor undergraduate cycle and postgraduate cycles for master's and doctoral degrees (PhD). Nursing education should ensure that qualified and competent nurses are available to meet changing population needs and changing health care to achieve the best health outcomes for populations.

Postdoctoral nurses (PNs) are educated at the highest academic level (PhD-degree) and have professional expertise in conducting research, translating evidence into clinical practice, co-lead patient outcome improvement initiatives and teaching. Due to the important role that PNs play in creating the knowledge base for quality care, improving patient outcomes, and educating the next generation of nurses. Institute of Medicine recommended doubling the number of PNs (PhD-degree) in the US (estimated to be less than 1%), by the year 2020. European countries should adhere to this recommendation that at least 1% of the nursing workforce should have a doctoral degree (PhD). Despite this still almost 30% of member states do not offer any doctoral education for nurses. The proportion of PNs in Europe is expected to be much lower than in the US. However, the exact number of PNs unknown and there is no information on their contribution is to health care across European countries. The limited research on leadership and working conditions of PNs shows that they lack career opportunities with no access to positions where they can influence health care. Barriers are: lack of suitable positions and career opportunities; high workloads, and low job satisfaction. The number of PN's developing into professorships shows difference between countries, with high numbers of professors only a few countries with much lower numbers in most other countries. This indicates that due to difficult working conditions and lack of access to the right positions, PNs' are seriously limited in their ability to positively influence European health care and policy at all levels.

PNs need enhanced leadership skills to enable them to actualise their scientific and professional expertise in health care so that they are able to operate effectively at all levels in organisations within and across countries. Not only do they need to develop leadership influencing individuals, groups, and organizations but also policy and political leadership; representing diverse cultural, political, institutional systems and involving multiple cross boundary stakeholders. Leadership development opportunities for PNs are lacking. Individual initiatives have been launched to address this issue but were only confined to a few countries. Successful leadership development opportunities need to be expanded on. The work of European nurses, including PNs, and providing empirical evidence for how nursing workforce dynamics impact patient outcomes and nurses' wellbeing are exemplary. Another group of European nurses, including PNs, reported on missed nursing care occurring in response to organisational circumstances that negatively affect nurses' capacity to carry out care activities. Lack of leadership were among the factors resulting in nursing care being missed. The outcome of this work have informed policy makers' decisions and strategies to avoid workforce shortages and to improve quality and safety of care, - gained international attention and is cited in high-level policy documents by the EC, WHO, OECD. This Action further builds on the findings earlier work emphasising the importance of strong leadership and improved working conditions of the nursing workforce in improving health care across countries. Although these are important conditions for the nursing workforce. This Action focuses on PNs due to their professional expertise in research, evidence based practice and education and because they are important resource for further leadership. By improving PNs leadership and working condition, this Action will enable PNs to positively impact the care of patients and the education of nursing students, ensuring that qualified nurses are available to meet changing population and positively influence European health care and policy at all levels.

1.1.2 DESCRIPTION OF THE CHALLENGE (MAIN AIM)

The main challenge we face is the lack of PN leaders, available at the right place and right roles, to capitalize on the nursing potential and to include nursing in decision-making in Health Care Facilities (HCF), Higher Education Institutes (HEI), academe, and policy. Therefore, this Action aims to establish a transboundary network of partners across Europe. The main challenges to tackle are the following:

1. To gain insight into the current number and working situation of PN's in Europe. There is a need to systematically find out the number of PNs in European countries. The IOM recommendation that the proportion of PNs should be 1% of the nursing workforce. The number of PNs in Europe is expected to be much lower than in the US, but no information is available on this. In the year 2014 still almost 30% of member states did not offer any doctoral education for nurses. There is a need to gain a deeper insight into this situation across countries.

2. To develop competencies and to establish competency framework for PNs to make optimal use of their expertise for health care. International corpuses have developed competence frameworks for researchers (ERA, 2020). There is a limited information on competencies for different roles and positions where PNs work. No competency framework exists describing the required competencies for the different roles and positions of different fields of academe, clinical practice, education or policy where PNs work. Clearly defined competencies and a competency framework is badly needed for PNs to create knowledge base for improving patient outcomes, and educating future nurses.

We will address the aforementioned challenges by:

3. To establish ideas for clinical-academic partnerships and develop protocols for Advanced Academic Career Pathways (AACPs) and joint positions for PNs. PNs seem to work in different part-time positions in nursing faculties of HEIs and there are very limited number of clinical-academic partnerships between nursing faculties of HEIs and HCFs and a lack of joint advanced academic pathways or joint positions. The need for enhanced clinical-academic partnerships between academic nursing, nursing faculties to improve health care has been highlighted. Clinical-academic partnerships exist, but are only limited to a few individual countries. There is a need to develop ideas about potential partnerships and create protocols for innovative AACPs and joint positions (matching competencies), which will allow PNs to work and research in clinical practice, thus enhancing clinical innovation through patient and community-oriented research. Joint AACPs and joint positions are imperative to provide PNs, but also nurses and students (all levels), with career opportunities in which they combine clinical work with research and education at different levels in the organisation. There is a growing need to create insight in successful best practices of AACPs and joint positions and identify nurse leaders to influence policy on all levels of organisations to present novel solutions.

4. To establish Pan-European Postdoctoral Leadership program for PNs based on effective leadership strategies to support sustainable career development of PNs in academia, health care, education, policy and politics to secure their optimal impact. Global reports call for PNs to develop leadership competencies to support their leadership and academic career development. Based on the growing evidence for transformational leadership positively impacting patient, workforce and organizational outcomes and successful earlier individual initiatives showing positive outcomes, this Action will identify effective strategies and further build on the experience and building blocks of our earlier programmes to establish a leadership program for PN to support their career development. More information is however, needed on important strategic leadership and policy strategies to address leadership of PNs at different organisational levels to secure successful outcomes. Based on this background the overall aim of this Action is to strengthen the leadership development of PNs and support them to gain access to more influential positions in health care, academia and policy, based on a cross-national approach, achieved by collaboration and networking and by integrating different disciplines and approaches including nursing, health care, ethics, philosophy, economics and social policy.

Relevance and timeliness

The aforementioned challenges are considered both relevant and timely. Considering the increasing calls for well-educated, empowered and influential PN-leaders,- this call has never been greater than at current times due to the Covid-19 pandemic and unprecedented nursing staff shortages. This Action will bring scholars from all levels from various COST and International Partner Countries together to establish a transboundary network of partners across Europe,- to effectively propose ways to improve the situation and develop new knowledge. Previous efforts have not captured the complexity and multidimensionality of the problem. The most pressing educational issue facing the profession is lack of rigorous preparation of doctorally prepared nurses to lead the nursing profession into the future. PNs have expertise in translating evidence into clinical practice and education, - however joint positions optimally giving them opportunities to improve health care and education are not available. Crucial

information about the number of PNs in Europe and their working conditions is lacking as well. In many European countries doctoral education is still unavailable (30% of countries) indicating that there may even be no or only few PNs, with even worse working condition. Some countries also have lower entry level (diploma level) into nursing, which may lead to lower quality nursing education and patient care. Despite the growing evidence that higher educated nurses positively impact patient and health care outcomes,- no information exists on the number or working condition of PNs, who have the highest educational level and there is no information on their contribution to health care. There is a need to clarify which competencies PNs need for a range of (joint) positions and there is a lack of innovative advanced academic care pathways (AACPs) to support nurses into such positions. Powerful leadership development programmes are practically non-existing for PNs to develop sustainable careers to get closer to the decision-making table across health care, education and policy. As noted, there is growing evidence for leadership impacting nursing, patient and health care outcomes and growing evidence that lack of leadership is a factor in missed nursing care. The International calls for a joint effort to create leadership development opportunities for nurses, were recently ranking it as the highest priority for healthcare and societies. There is a pressing need to: (1) deepen knowledge on the key players, namely the PNs, their characteristics and their working condition, (2) further the development of competencies for PNs. This Action will do this by: (3) sharing best practices of clinical-academic partnerships including ACCPs and diverse types of (joint) positions influencing all levels of health care (micro/macro); (4) establishing a Pan-European Postdoctoral Leadership (online) program for PNs to support sustainable career development of PNs by using effective leadership strategies to facilitate PNs into positions influencing all levels of health care. This Action will be the catalyst in the field and to create a synergy to implement effective strategies to capitalize on PNs competencies and leadership skills in the European countries. On the long run, this will result in stronger leadership of nurses in different arenas and at all levels and unlock decision-making positions for nurses in scientific, clinical, educational settings including policy and politics.

1.2 PROGRESS BEYOND THE STATE-OF-THE-ART

1.2.1 APPROACH TO THE CHALLENGE AND PROGRESS BEYOND THE STATE-OF-THE-ART

In view the fragmented work, the complexity of the topic and gaps in knowledge regarding the situation of PNs, this Action will enable and facilitate internationally coordinated exchange of expertise and knowledge to further plan line of action on European level. Creating thorough insight into the number and characteristics of PNs and information on where they work is important basic information for the nursing profession and the development of nursing as a scientific discipline. The fragmented knowledge available on the situation of PNs in Europe is very limited, with most studies conducted in the USA. Gaining information on the situation of PNs is not only important for patients and clients to secure that their voice is included in decision-making in health care of health care, but is also important for other nurses working in different areas of health care and for health care professionals, because PNs have the highest expertise in conducting research, translating evidence into clinical practice, co-lead patient outcome improvement initiatives and teaching future nurses. The activities of this Action will further create a number of innovative initiatives to improve the situation of PNs including: developing competencies and a competency framework for PNs, and developing profiles for innovative AACPs and joint positions, and establishing a Pan-European Postdoctoral Leadership program for PNs using effective leadership development strategies and through online workshops, meetings with experts in the field and by establishing mentoring trajectories for PNs. This Action will take into consideration the multidimensionality and underlying processes relating to the situation of PNs, discussion of ideas and exchange of expertise to develop ideas and concepts into tangible products beyond the lifetime of the Action to further support successful clinical academic partnerships between health care and HEI organisations in optimally positioning PNs. The work focusing the development of competency framework and profiles for AACPs and joint positions will enhance understanding of the important role of PNs in health care, education and research and clarify positioning of PNs within organisations, support managers and administrators in decision making and judgement processes in relation to PNs. The knowledge developed will contribute to understanding of dynamic interplay between different system and organisation factors influencing the work of PNs at all levels of organisations and how to influence these to improve the situation of PNs. Collaborations will be established matching countries with a strong tradition of clinical academic partnerships to partners with a limited/no partnerships. The information gained through these processes, will serve as building blocks to establish profiles for innovative AACPs and joint positions to support PNs into more effective decision making positions, which in turn will support the frontline nursing workforce who see successful role models. Further innovative activities of this Action include the establishment of an Pan-European Postdoctoral leadership

programme (online) including leadership and mentoring trajectories, based on the shared expertise, discussion, focus group/individual interviews and workshops.

What to expect beyond state-of-the-art?

This Action will support PNs as academic nurses providing leadership across all fronts:

In clinical practice, the knowledge and products developed in this Action clarify and improve the position of PNs to impact health care. PNs with strong leadership in joint clinical-academic positions will: ensure the highest quality of care and bring support to the entire team of professionals; bring research closer to clinical practice; equip PNs to develop and evaluate innovative health care; and improve translation of evidence based practice (EBP) into clinical practice by supporting clinical practice nurses in the use of EBP, directly impacting patient and health care outcomes.

In nursing education, the knowledge and products developed in this Action will improve the position of PNs to impact nursing education at all levels, bachelor, master and PhD, as better positioned PN-educators with more strategic leadership/joint positions will positively influence education through improved teaching, higher quality, more innovative cutting-edge bachelor's/master's/PhD programmes with stronger focus on leadership development, strengthening students education in EBP and research. The criticality of leadership development at all levels of education has been emphasized in the literature. PNs educators and professors showing strong leadership will be inspiring role models for nursing students, the future nursing professionals. Besides, learning materials will include innovative, up-to-date EB-knowledge, digital, combined with research ensuring that interest and skills are progressively developed from the early stages of students nursing career.

In research, the knowledge and products developed in this Action improve the position of PNs to impact research as better positioned PNs in more strategic leadership and joint positions will positively influence clinical research and through this influence policy and politics. PNs with stronger leadership will be able to strengthen the of quality, safety, care delivery models; self-management; symptom management; informatics and the science of leadership. PNs working in research with stronger strategic leadership, leads to increased research productivity and research capacity, more effective nursing science strengthening PN's in transforming health care. A common research strategy and agenda aimed at advancing empirical knowledge will result in more high-quality research with focus on robust methodologies. Better positioned PN-researchers will influence curriculum development by bringing more scientific methods and stimulating EB working methods.

Policy and Governance level, the knowledge and products developed in this Action clarify and improve the position of PNs as better positioned PNs in more strategic leadership positions on boards and governmental levels of organisations are able to influence health care policy and politics and will be able to create more comprehensive health strategies, more multiprofessional policies and more patient-oriented strategies. Thereby, PNs will secure the distinctive nursing perspective and patient voice in policy decisions on governmental level, which is especially important in the current times of Covid-19 pandemic. This Action focuses on PN's because they are the experts in health care innovation and higher education. PNs leadership skills and competencies acquired through this Action will flow through the entire nursing workforce, stimulating leadership of nurses at all levels and thoroughly impact health care quality and safety through improved evidence based practices.

1.2.2 OBJECTIVES

1.2.2.1 Research Coordination Objectives (RCO)

a) To develop knowledge, creating insight into the positions, characteristics, working conditions, leadership and career development of PNs in European countries (WG1). Despite the importance of PNs and their expertise for health care and education, there is no information on their number, working conditions or their development in Europe. PNs are confronted with various barriers in their career development, like lack of positions and career opportunities, where they can use their expertise and optimize their contribution to health care and the education of the nursing workforce. Nursing faculties are struggling. No large scale studies have investigated the situation of PNs in Europe and there is no in-depth discussion to capture the multi-dimensionality and complex interaction of the various factors involved. **This objective** will be implemented by conducting a cross national survey on the characteristics of PN's and doctoral nursing programmes in European countries. PNs in countries across Europe will be invited to take part in this survey through the partnering organisations: European Academy of Nursing Science (EANS), European Federation of Nurse Educators (FINE), European Nurse Directors Association (ENDA), Sigma Theta Tau International. Also the consortium has close contacts with International Network for Doctoral Education in Nursing (INDEN) and the Baltic Sea Region University Network (BSRUN) who have good reach to PNs in former eastern European countries. This objective will also be implemented via the organisation of 2 workshops among

stakeholders discussing conceptualizations, terminology, methodological issues arising from research on the situation of PNs in the first year and 2 workshops discussing organisational, system factors and infrastructures to establish a more in-depth understanding of the complexities of the issues and facilitate the direction of the discussion for the subsequent objectives of the Action. In addition, the production of 2 peer-reviewed papers in the 3rd and 4th year will indicate that this objective has been fulfilled.

b) To develop a competency framework for PNs and relevant joint positions (WG2). At the moment there is fragmented information on the competencies and no competency framework for PNs exists. Identifying and further developing competencies for PNs to establish a competency framework matching the range of (joint) positions at different levels to support their contribution to health care, education and policy at all levels (matrix). Having a competency framework will support PNs in their different positions and roles and will support managers, administrators, organisations and governing bodies in establishing innovative positions for PN, will clarify their different roles aligned with different positions. **This objective** will be implemented by conducting online Delphi rounds and online expert meetings soliciting input from experts across countries. This Action will enable 4 workshops, expert meetings and focus group interviews with experts to further develop the competency framework. The production of 1 scientific paper on competency framework in year 3 and 2 policy papers on its development informing policy makers/stakeholders on the importance of PNs for European Health care in year 4 with input from all stakeholders will indicate that this objective has been fulfilled.

1.2.2.2 Capacity-building Objectives (CBO)

This Action has the following Capacity Building Objectives:

a) To create a network to foster knowledge exchange, build, exchange best practices of innovative AACPs and joint positions for PNs (WG3) There is very limited information about the career development opportunities of PNs in health care, education or academe or into other influential strategic positions in policy or politics. There is increasing evidence for the importance of clinical-academic partnerships (between HEIs and HCFs) and for the importance of joint ACPs and joint positions. However, only incidental initiatives have been identified, with hardly any discussion on European level. **This objective** will be implemented by conducting 3 workshops and expert meetings discussing organizational factors and infrastructures influencing PN's situation and to identify best practices of AACPs, (joint) academic positions in year 1 and 2. The production of 1 discussion paper on the importance innovative AACPs and innovative (joint) strategic positions in the 3rd year, 1 policy paper informing policy on the importance clinical-academic partnerships in 4th year with input from relevant stakeholders will indicate that this objective has been fulfilled.

b) To foster knowledge exchange through the development of stakeholder platform establishing a Pan-European Postdoctoral Leadership program and developing a joint research agenda (WG4). The lack of leadership in nursing and limited/lack of leadership development opportunities for PNs, cuts across all arenas of health care and all levels of organisations and settings. Despite the evidence for the importance of leadership in nursing, there is no ongoing communication between experts or stakeholders to collectively identify gaps in the knowledge, especially on strategic leadership and ways to measure leadership and to foster co-ordinated and collaborative research. **This objective** will be implemented by establishing a Pan-European leadership program for PNs using effective leadership development strategies and through online workshops, meetings with experts in the field and by establishing mentoring trajectories for PNs. This work builds on existing developments of some of the partners of this network; also, by conducting 4 workshops discussing leadership strategies; different frameworks for academic advancement and the most suitable leadership assessment instruments, - discussion is with stakeholders and conducting online focus group interviews with experts to establish the most effective outcomes. This Action will enable 4 international workshops during the first 2 years of this Action. The production of 1 scientific scoping/integrative review paper in year 3rd and 1 discussion paper on "meet the experts" focusing on strategic policy leadership in nursing in year 4 allowing input from all relevant stakeholders will indicate that this objective has been fulfilled.

c) To disseminate the results towards stakeholder groups nurse professional bodies, unions, patient associations, hospital managers, policy makers and the general public (WG5). Different dissemination strategies have been thoroughly planned focusing on different stakeholder groups, each with different goals of dissemination and different strategies focusing on each stakeholder group. Dissemination will focus on the following groups: nursing and health care researchers, nurses in general, health care professionals, educators, policy makers and the general public. The different dissemination strategies used include publication of public friendly articles, peer-reviewed scientific articles, conference presentations which also will be presented on conferences organised by the stakeholder partners like EANS, FINE, ENDA, and Sigma, an online newsletters published on the website, regular

feeds posted on social media, like LinkedIn, Facebook and Twitter. See figure 1 for further details of dissemination group, goals and strategies planned.

2 NETWORKING EXCELLENCE

2.2 ADDED VALUE OF NETWORKING IN S&T EXCELLENCE

2.1.1 ADDED VALUE IN RELATION TO EXISTING EFFORTS AT EUROPEAN AND/OR INTERNATIONAL LEVEL

This Action will enable the creation of networking activities to jointly develop innovative ideas to tackle the aforementioned challenges which can only be solved by committed stakeholders creating synergy through this network. This Action builds on the expertise of earlier efforts which were focused on issues closely related to those challenges but not focusing on the situation of PNs. The added value of this Action in relation to existing efforts is three-fold: **1)** The network itself, **2)** Existing efforts at European and International Level and **3)** Training and dissemination of the outcomes developed in the Action.

The Network. The network includes many European countries with much diversity, especially in terms of maturity of nursing science and doctoral nursing education. Countries include both Cost countries, Cost Inclusiveness Target Countries, International Partners and European and International organisations. Efforts in uniting the expertise on the situation of PNs in European countries do not exist. Although the evidence on leadership is growing, there is hardly any literature the situation of PNs in Europe with the only literature originating from North-America. This Action will be an unprecedented move to establish a network across disciplines and between front-runners and followers within nursing sciences to establish a Pan-European Postdoctoral Leadership program for PNs and will enable to create networking activities (e.g. workshops, TS, conferences) to jointly develop ideas and initiatives to improve the situation of PNs. We are aware that by involving many countries with different cultures and maturity of nursing science, coordination may be difficult, however many of the consortium partners have gained experience in earlier collaboration work and have gained good track record in coordinating large EU projects.

Existing efforts at European and International level. No projects are being conducted exploring the situation of PNs in Europe. Only fragmented information exists, like one review providing information on doctoral education in Europe stemming from 2014 and another review on exploring the situation of PNs in the international context stemming from 2017. However further up-to date information. Projects focusing on the leadership of PNs exist in North America, with European efforts limited to one national and one European project showing that PNs following these programmes strengthened their leadership and career development, improved research productivity and reported positive experiences. Earlier efforts linked with this Action and developed by some of the consortium partners focus on the strong evidence for higher educated nurses improving patient, health care and workforce outcomes and importance of leadership in nursing. This Action has developed a strong network with European and International organisations, focusing on leadership and PNs, like EANS, FINE, ENDA, including Academia Europeae and International Nurse Researcher Hall of Fame of Sigma, all representing PNs, nurses and other scientists, educators and nurse directors with broad expertise. Also, we have close contacts with INDEN and BSRUN. Thereby this Action is unique and brings together European and International experts in discussion, sharing best practices on how to improve the situation of PNs and the way forward. In this Action it is the first time that the limited knowledge we have on the situation of PNs is brought together to further develop new knowledge not only to enhance research on leadership, but also to create awareness among stakeholders about the importance of strengthening the leadership positions of PN's at all organisational levels. By fostering knowledge and creating awareness, the transition towards a better positioning of PN's, which will influence frontline nurses working in health care and education across European counties.

Training and dissemination. The Network of large number of partners from European and international universities offers the opportunity, especially through the establishment of the Pan-European Postdoctoral Leadership program, to provide training in leadership career development for PNs through this Action. This Action provides a starting point to build on the future generation of leaders within nursing research. Diverse dissemination strategies are planned tailored to the needs of different stakeholder groups (see Figure 1). The Action supports a broad outreach of the knowledge and expertise acquired within the network and will enhance sustainability of research leading to improved quality of care and patient safety within healthcare.

2.3 ADDED VALUE OF NETWORKING IN IMPACT

2.2.1 SECURING THE CRITICAL MASS AND EXPERTISE

This Action has the critical mass and expertise needed to tackle the challenges identified and to achieve the objectives specified to address these challenges. The Action will bring together nurse leaders, scientists, professionals, directors, CEO's of international and European nursing organizations and other stakeholder across Europe and beyond to explore ways of strengthening leadership and to improve career opportunities of PN's. Partners are leading and emerging experts in the different fields of nursing, education, economics, statistics and information technology (IT) and psychology. It is highly important to involve policy makers and experts from other fields as they will learn about the challenges of nursing and they will communicate to the outside world about the importance of leadership of PN's health care. The 47 proposers from 40 institutions in 24 countries, who have agreed to participation will enable us to create a strong network. The distribution of geographical, career stage and gender balance needed to ensure that theory development, methodological integration and training reaches critical mass is secured by the network composition, consisting of 45,5% ITCs, 10 (21%) ECIs and 78,7% women. It is important to highlight the importance of partnering organisations like EANS including European PN researchers; FINE nurse educators; ENDA nurse directors and managers and Sigma Theta Tau International a global group of nurse scholars as well as close connection INDEN and BSRUN who have a large reach in former eastern European countries. Although the nursing field is traditionally a field dominated by women, this Action will aim to strive for as much gender balance, as possible in all WGs' with a significant number of men participating. Bringing international expertise is imperative and therefore the network also involves experts on leadership from strong nursing faculties from 2 International Partner Countries including: USA and S-Africa who have agreed to provide expert input in the WG's. All partners involved are committed to integrate their knowledge, strategies, methodologies and data for the mutual benefit that the common research agenda to develop the field of nursing science.

2.2.2 INVOLVEMENT OF STAKEHOLDERS

The Action will engage the following stakeholder groups in Europe,- in particular:

The healthcare research community in Europe. The most important stakeholders in this action are: academics and researchers active in various fields of nursing, psychology, health economics, statistics, and health care ethics. It also includes non-academic partners like health care professionals i.e. nurses at various levels of expertise and managers, policy makers, educators, government bodies and professional nursing organisations including organisations like EANS, including PN-researchers and Sigma Theta Tau International a global group of nurse scholars. The Action will bring together researchers from different countries and disciplines aiming to form collaborations and partnerships enabling rigorous scientific work. The focus will be on establishing core groups of experts who will be linked to each of the WPs. Internationally recognized experts in the field of strategic leadership and research, who are connected to different stakeholder networks will be closely involved. New members like nurses and other professionals from a range of health care facilities will be encouraged to join the Action. The Action will expand through the connections of the core-groups' current networks and will organize (online) international workshops, conferences and transnational meetings to involve stakeholder groups. Dissemination will take place through network meetings including conferences held by the European and international organizations involved.

The healthcare sector. Enhancing leadership of PN's and the related impact this potentially will have on the healthcare sector is important for the strategic management of healthcare organisations, which have an important role in the transformation of the position of PN's in healthcare organisations. Important consortium partners, ENDA, representing nurse directors and managers of diverse organisations. This stakeholder group will be reached by current consortium members and partnering organisations who will reach out to nurses, managers/directors, CEOs and invite them to take part in the Action.

The healthcare education sector. Nurse educators provide education to the future generation of nurses at the different levels. Their expertise and commitment to the subject of leadership is crucial for bringing this field further. Important partner is FINE, representing nurse educators. A large part of the consortium partner institutes are HEIs including FINE who will reach out to educators, professors and nursing students invited to take part in the Action.

Policy makers at the EU, national and local level, including EU's DGs on Health and Food Safety, Employment, Social Affairs and Inclusion, and Research and Innovation; the Ministries of Health in the countries are involved in the Action. Policy briefs and White papers will, when relevant, be addressed to these stakeholders. We will establish links with these organizations and institutions who will be invited to take part in the Action. The involvement of stakeholders will be managed by the Leader of WG5: Inclusiveness, dissemination and stakeholder engagement, who will be responsible for the Stakeholder Analysis and Engagement Strategy, which will be formulated at the start of this Action and updated annually. Through this strategy, the Action MC will ensure that the most relevant stakeholders are

involved as members and through participation as invited speakers, trainers and workshop participants. The strategy will be cross-disciplinary and strongly inclusive, by ensuring balanced stakeholder involvement from COST member countries (with emphasis on COST ITC) and of the different stakeholder groups.

2.2.3 MUTUAL BENEFITS OF THE INVOLVEMENT OF SECONDARY PROPOSERS FROM NEAR NEIGHBOUR OR INTERNATIONAL PARTNER COUNTRIES OR INTERNATIONAL ORGANISATIONS

As the challenges of nursing and healthcare are shared globally, we believe the solution should come through broad participation and synergy creation. The secondary proposers are involved in the Action, from two International Partner Countries (IPCs) whose representatives have strong expertise and will enable shared knowledge development based on expert input from two different regions: North America: Duke University USA and Africa: Stellenbosch University and North West University in South Africa, both leading authorities with expertise in leadership and nursing science. This unique collaboration will for the first time, bring leading academics together to effectively tackle the situation of PNs. The IPCs have strong expertise in leadership of PNs and research and some European countries have strong nursing science faculties and all will share best practices. By establishing collaboration between countries with different level of maturity in nursing science, we will be able to compare and share results. On top of that, Sigma has more than 135.000 nurses as members in over 90 countries within 700 HEI's, across the world, with 40% of members with MSc or PhD degree, ensuring a broad engagement and dissemination of results. EANS is the leading organization for PNs in Europe with 400 members. Both Sigma and EANS have a strong focus on leadership and research. Other partnering organizations are FINE and ENDA which include large number of nurses across Europe. Some partners are members of Academia Europaea, which includes NPs and interprofessional scientists. Another partner, expert in evidence based practice, is Joanna Briggs Institute Global with institute in Finland (<https://jbi.global>). As stated this Action has close connection with INDEN-Network and the BSRUN-Network with a broad reach in former eastern European countries The collaboration with these leading international experts will result in a mutual understanding of leadership in PN's, strengthening the efforts towards establishing the research agenda. It will build on global partnerships in nursing science and stimulates transfer of knowledge on a broader scale than has been known before.

3 IMPACT

3.2 IMPACT TO SCIENCE, SOCIETY AND COMPETITIVENESS, AND POTENTIAL FOR INNOVATION/BREAK-THROUGHS

3.1.1 SCIENTIFIC, TECHNOLOGICAL, AND/OR SOCIOECONOMIC IMPACTS (INCLUDING POTENTIAL INNOVATIONS AND/OR BREAKTHROUGHS)

SCIENTIFIC IMPACT

This Action will be a catalyst for the nursing science and will enhance the level of research on leadership and the situation of PNs which will lead to: improved leadership of PNs (through leadership programmes), knowledge development of excellent professional practices based on competency framework,- which will lead to improved clinical and health care outcomes of health care organisations. PNs will gain a place as a partner in health system governance. This Action will expand academic nursing leadership in clinical practice and support the growth and evolution of research programs in partnership with other professional groups; Integrate academic nursing into population health initiatives; provide system-wide commitment to leadership development to prepare and support future nurse leaders. The Action will ensure that leadership research, strategies, methods and policies are imbedded in nursing science to ensure that the profession can face the future challenges of health care.

Thereby in the long term This Action will impact:

Academia. This Action will create a Pan-European Postdoctoral Leadership Program supporting Leadership of PNs in European countries. This Action will stimulate the growth of numbers of PNs to reach the recommended level of 1% in Europe (by the year 2024) and enable more PNs to reach higher positions across health care. This Action will support current countries not offering doctoral nursing education to make the first steps in establishing doctoral nursing education. As the nursing science field strengthens research and develops international collaborations in research, avoiding fragmentation and duplication. Synergies among faculties will increase with more collaborations in research from the international network established in this Action. This will result in flow on effect on research and development of innovative, affordable health care, meeting the needs of future populations. Empowered PN's with strategic leadership will establish more research collaborations leading to increase in research productivity, improved publications, grant funding, research and improved research capacity. Stronger strategic and policy leadership will strengthen PN's and will improve work related outcomes like

empowerment and job satisfaction not only of PN's but also nurses who see these strong PN-leaders as role models. More innovative advanced strategic positions and ACP and diverse types of joint positions will strengthen academic work and translation of EBP into clinical practice education to improve education of nursing students ultimately to improve European health care. By reaching the 1% benchmark of PNs, this will enable more PNs access to boards of academic institutes to reach 2% by the year 2024. Through this Action at least 50 of PNs have followed the Pan-European leadership programme by the year 2024, who show significant improved leadership and career development and research output.

Healthcare sector. This Action will stimulate the growth of the number of PNs to reach 1% which also with increased number of PN's working in clinical-academic positions where they support frontline nurses in more EBP being applied, monitored and improved in clinical settings. This will result in both clinical benefits in improved patient safety and health care outcomes as well as improved nursing workforce like higher job satisfaction, less burn-out, resulting in less attrition from the nursing workforce and economic benefits. Stronger partnerships between HEIs and HCIs in research, will lead to stronger joint clinical research and more translation of EBP into clinical practice. More innovative ACP's and joint positions for PN's will result in improved career perspectives, leading to less burn-out and lower number of nurses leaving the profession. Through this Action increased number of PNs with strong leadership will gain access to hospital boards, aiming to reach 2% by the year 2024. Through this Action at least 50 PNs who are also working in clinical practice have followed online the Pan-European leadership programme by the year 2024, showing improvement in leadership and career development.

Nursing education This Action will stimulate the growth of numbers of PNs to reach the recommended level of 1% in Europe and thereby to enable more PNs to reach higher positions education, nursing faculties at Universities. Also, this Action will support member states not offering doctoral nursing to establish doctoral nursing education. Synergies among nursing science faculties in Europe will strengthen nursing education on all levels. The criticality of leadership development in nursing education has been emphasised and realities such as the Covid-19, nursing shortages intensify the need to strengthen leadership of nurse educators and nursing students at all levels of education. By strengthening leadership and career development of PN's, and offering AACP's with joint education-academic positions, this Action will support and strengthen leadership of PN's in education-academic positions making them more equipped to teach research, innovations and EBP to students. This will also reduce attrition of nurse educators. Through this Action increased number of PNs with strong leadership will gain access to university boards, aiming to reach 2% by the year 2024. Through this Action at least 50 PNs who are also working in education have followed the online Pan-European leadership programme by the year 2024, showing improvement in leadership and career development.

TECHNOLOGICAL IMPACT: This Action will create an online-Pan-European Postdoctoral Leadership Program supporting Leadership of PNs in European countries. This platform will include a wide range of online training modules focusing on different areas relevant for PNs and ECIs with focus on the fields of clinical, research and education as well as policy and governance. The Action will also create forums for different groups to work, conduct assignments and take part in group discussions. Furthermore, it will provide the PNs and ECIs with forums to discuss how technology can support health care, education and research by developing specific products which in the long turn can be developed and tested after the end of this Action.

SOCIOECONOMIC IMPACT: Nurses are the largest workforce in healthcare and know the problems of the system. With nurses providing up to 80% of care to patients, families and communities, worldwide nurses have a large impact potential. PNs benefiting from this Action will immediately bring benefits back to nurses working at different levels (micro/macro) in various health care settings, i.e. clinical practice in hospitals, home care, nursing home and other health care facilities and teaching faculties (BA/MA/PhD) and research departments. This Action will show strong socioeconomic impact through better positioned and empowered PNs showing strong leadership will influence other nurses in the field as empowered well-educated nurses will experience better relationship with managers, trust in the organization, show higher job-satisfaction, be more committed and provide better quality of care, which will ultimately lead to improved patient, professional and health care outcomes. In the short-term important information will surface from this Action regarding: a) demographic characteristics of PN's; b) competency framework established for PNs; c) establishing Pan-European Postdoctoral Leadership Programme including effective strategies for leadership (policy) development; d) best practices from countries leading the way in nursing science to support other countries and thereby to impact patient and health care outcomes. Long term improvements can be expected from increased strategic leadership among PN's: a) making healthcare effective and cost-efficient by optimizing care based on their scientific expertise; b) supporting leadership of nurses so they take more responsibility in providing EB-care to patients; c) advancing towards a more pro-active role of nurses as strategic partner for future

healthcare changes (e.g. community home care, digitalization); d) Empowering nurses to become more emancipated towards other interdisciplinary staff and stakeholders and to aim for decision making positions and e) improved health and social policy development as PNs will feed their expert knowledge, based on their expertise from working at the interface of health systems and the community where they live.

MEASURES TO MAXIMISE IMPACT

3.2.2 KNOWLEDGE CREATION, TRANSFER OF KNOWLEDGE AND CAREER DEVELOPMENT

Knowledge Creation: This Action will lead to evidence based knowledge creation on the state of nursing science in Europe by collaboration between PNs and other experts in health care across countries, combining different areas of expertise, acquiring and combining new data of countries that will set the ground for collaborative initiatives for further improving research and implementation of innovations in health care across countries. By bringing together a large network of experts, European and International organisations, like EANS, FINE, ENDA, Sigma including JBI Global (expert on EBP), this Action will create a high-quality evidence-based knowledge on the situation and leadership of PNs currently missing. Knowledge and expertise on all project parts: a) number and characteristics of PN's (online survey); b) AACPs and joint positions (best practices, case studies, interviews, survey data); c) competency profiles and framework (expert meetings, Delphi rounds) d) leadership strategies (scoping review/expert meeting) will be transferred and disseminated through open access peer-reviewed publications, training schools, meetings, conference presentations, workshops, websites and social media with involvement of a broad range of stakeholders maximizing the impact to the wider community. Finally with the establishment of a Pan-European Postdoctoral Leadership program to provide European PNs with optimal leadership opportunity to strengthen their strategic leadership including policy leadership which will be achieved by advancing collaboration between the consortium partnering countries and partnering organizations like EANS, FINE, ENDA and Sigma. This Action will emphasize that by participating in all training activities (IWS, STSM, TSs), will facilitate academic leadership and career development of ECIs developing into successful PN leaders working in research, health care, teaching and academe. A new generation of experts will be created through cross-disciplinary education/training activities in an international environment.

3.2.2 PLAN FOR DISSEMINATION AND/OR EXPLOITATION AND DIALOGUE WITH THE GENERAL PUBLIC OR POLICY

An effective dissemination strategy is essential to the ultimate success of this Action, as this will create awareness and enable all target groups, who will be affected by the Action. The dissemination strategy starts with a stakeholder analysis; further specifying the stakeholders' groups, the goals and methods and means of dissemination. The dissemination strategy is designed to ensure the widest possible dissemination of the Actions results throughout Europe. Dissemination activities will also enable knowledge transfer and expertise between Action members and other stakeholders, accelerating uptake by the general public. A joint dissemination plan will outline details of network communication versus communication to outsiders. Network communication, *within the project includes* communication between project partners include: a website, an online platform with closed part for the partners. Project communication will focus on content, communication, processes and outcomes of WG's including regular news letters. Communication *outside of the project* includes dissemination of information and communication with different stakeholder groups like: i) nursing and health care researchers; ii) nurses in general; iii) health care professionals; iv) educators; v) policy makers and vi) the general public. Goals and means of communication will match with each stakeholder group. The main dissemination strategies include: a) online, face-to-face meetings/conferences; b) scientific and public friendly publications and reports; c) website, including newsletters, blogs and publications; d) social media with regular posts on LinkedIn, Facebook, Twitter. The basis for this plan has been defined and will further be detailed at the beginning of the Action (Figure 1). The dissemination strategy will be developed, monitored, evaluated and improved in WG5. A Dissemination Coordinator will be appointed who will be responsible for developing the dissemination policy.

Stakeholders	Goal	Means of communication
 <p>Nursing &</p>	To inform about the activities offered to develop leadership competences and	<ul style="list-style-type: none"> - Conferences: EANS, FINE, ENDA, Sigma International (research) conferences & meetings

<p>health care researchers</p>	<p>stimulate high quality research.</p>	<ul style="list-style-type: none"> - Publications: (non)peer-reviewed journals including Journal of Nursing Scholarship, International journal of Nursing Studies; Reports. - Social media: LinkedIn/ Twitter/ Facebook - Website including online newsletter
<p> Nurses in general</p>	<p>To give the opportunity to participate in this Action to enhance their leadership competences. To encourage nurses to occupy decision-making positions.</p>	<ul style="list-style-type: none"> - Conferences: EANS, FINE, ENDA, Sigma (Inter)national (research) conferences & meetings - Publications: (not) peer-reviewed journals, news media (including online channels) - Social media: LinkedIn/ Twitter/ Facebook - Website (open part with regular information) - Online newsletter
<p> Healthcare professionals</p>	<p>To raise awareness among all clinical staff about the need to improve leadership among the nursing workforce.</p>	<ul style="list-style-type: none"> - Conferences: Interdisciplinary health care conferences - Publications: (not) peer-reviewed journals; including online publications - Social media: LinkedIn/ Twitter/ Facebook - Website including online newsletter
<p> Education sector</p>	<p>To ensure leadership is taught and implemented as a key subject in nursing, healthcare sciences and management studies.</p>	<ul style="list-style-type: none"> - Conferences: Educational conferences organized by FINE, Sigma, AMEE a. o. - Publications: in (not) peer-reviewed educational journals nursing & other professionals - Social media: LinkedIn/ Twitter/ Facebook - Website including online newsletter
<p> Policy makers</p>	<p>To raise awareness about the current situation and need to improve it. To change policies to ensure nurses are at the decision table. To boost career opportunities.</p>	<ul style="list-style-type: none"> - Conferences: Global regional, local conferences organized by Sigma; EANS, FINE, ENDA, International Council of Nurses; WHO/WHO's Health Assembly) and UN conferences. - Publications: Policy statements, white paper; - Social media: LinkedIn/ Twitter/ Facebook - Website including online newsletter
<p> General public</p>	<p>To raise awareness about the nursing shortages and potential, and the importance of leadership to improve patient care and the healthcare sector.</p>	<ul style="list-style-type: none"> - Publications: in news media, newspapers, news bulletins. - Traditional media: TV and Radio - Social media: LinkedIn/ Twitter/ Facebook - Website including online newsletter

Figure 1. Dissemination plan including stakeholders, goals and means of communication

4 IMPLEMENTATION

4.2 COHERENCE AND EFFECTIVENESS OF THE WORK PLAN

4.2.2 DESCRIPTION OF WORKING GROUPS, TASKS AND ACTIVITIES

The Action is organised around four content related working groups (WGs 1-4) and one working group focussing on inclusiveness, dissemination and public engagement (WG5). The first four WGs relate to the challenges defined and are: 1) Development of knowledge, creating insight into the situation and characteristics of PN's across countries in Europe. 2) Identification of competencies for PNs and development of competency framework. 3. Development of knowledge on innovative AACPs for PNs to develop into influential strategic positions including joint academic positions. 4) Identification and designing of theoretically empirically based interventions and programmes for strategic policy leadership

development and instrument to assess leadership and career development. Within each WG's the following activities/milestones will be reached:

M1. 8 Management Committee (MC) meeting assignment of all WG Chairs (Y1-Y4, Q1 & Q3),

M2. 4 WG meetings (Y1-Y4, Q1 & Q3),

M3. 8 Short progress reports to MC (Y1-Y4, Q1 & Q3).

Table 1. Working Groups' specific Objectives, Tasks & Activities

WG 1: Characteristics & Situation of PN's in Europe
<p>RC Objectives: Development of knowledge, creating insight into the characteristics, working conditions, leadership and career development of PNs. Sub-objectives: a) To provide insight in the characteristics of PN's, i.e. demographic, education, job satisfaction, career perspectives, positions, working condition, strategic/political leadership competencies. b) To map out doctoral programmes in Europe and to evaluate the existing knowledge on organisational, system factors and infrastructures related to the situation of PNs. c) To describe and compare situation/the level of leadership of PNs on a national/European level.</p>
<p>The tasks: In-depth discussion on the situation of PNs and the methodological techniques used to investigate the issue; Survey of PNs and doctoral programmes; organization of TS and Workshops; and writing of scientific papers. The activities of WG1: workshops, TS, writing of scientific papers.</p>
<p>Milestones: M4. 2 International Workshops (IWS) on methodological issues, situation of PNs (surveys preparation) (Y1,Q2, Q4). M5. 2 IWS discussing organisational, system factors and infrastructures of PNs situation (Y2, Q1,Q3). M6. 2 TS for ECR on methodological techniques (Y2, Q4; Y3, Q1). M7. Scientific paper on the characteristics of PNs in Europe (Y4,Q1) M8. Scientific paper on the doctoral nursing education (Y4, Q3).</p>
WG2. Development of Competency Framework for PNs, Competencies & Assessment
<p>RC Objectives: Development of competency framework for PNs and relevant joint positions. a) To identify competencies for PNs that match with a range of joint positions(micro/macro) b) To develop a competency framework based on Scoping review, providing a matrix for different competencies for different types of joint positions for PNS all levels (micro/macro) of organisations. c) to further develop competencies into assessment instrument.</p>
<p>Tasks of WG 3: Identification of competencies relevant for different types of positions and different levels(micro/macro); Collection of data through online Delphi rounds with experts and online expert meetings (focus group interviews); further activities of this WG include workshops, TS and the writing of scientific paper and policy paper.</p>
<p>Milestones: M4. 2 IWS identifying competencies relevant for different types joint positions for PNs (Y1, Q1,Q3) M5. 2 IWS which includes expert meeting to develop and establish competency framework for different academic positions by conducting online Delphi rounds and soliciting input from experts across countries to establish the most relevant and effective framework (Y2, Q1,Q3). M6. 2 TS for ECR on academic competencies and the academic advancement of nurses in clinical practice, education and research (academe) (Y2, Q1 and Y3, Q1). M7. Scientific paper on the development of the competency framework (Y3, Q4) M8. Policy paper reporting on the development of the competency framework for PNs matching with the various types of advanced academic joint positions (different levels, micro/macro) (Y4,Q2) M9. Policy paper on the importance of PNs for European Health care (Y4, Q4).</p>
WG 3: Development of Advanced Academic Career Pathways and (joint) positions for PNs
<p>RC Objectives: Development of knowledge on innovative AACPs and joint positions for PNs and other types of positions relevant for PNs to influence health care, education, research and policy. Sub-objectives: a) To identify best practices current infrastructures for the development of innovative AACPs and positions for PN's (diverse ideas on positions, clinical-academic, education-academic, influential strategic positions in policy); b) To provide insight into current partnerships between Health Institutes and HEIs to identify successful best practices for PN's working in different types of joint positions for all levels of health care. c) To map out the different frameworks for academic advancement relevant for PNs. d) To map out organisational factors and infrastructures associated with academic advancement of PNs.</p>

e) To identify possibilities for research professorships (advancement) and clinical professorships (to bear on increased research activity within the clinical setting) (advancement within clinical setting).

Tasks: Collection of best practices of successful strategic leadership positions, innovative ACP and joint positions; explore the literature describing current development of (joint) positions, for PN's and the outcomes of these; interview experts on the development of career pathways for PN's (joint positions); interview experts on possibilities for research professorships (academic advancement) and clinical professorships. organization of TS and Workshops; and writing of discussion paper and policy papers.

Milestones:

M4. 1 IWS discussing organizational factors and infrastructures influencing PN's situation(Y1, Q1)

M5. 2 IWS to identify best practices of AACPs, (joint) academic positions (Y2, Q1,Q3).

M6. 2 TS for ECI on AACPs, (joint) positions, academic advancement (Y2, Q2,Q4).

M7. 3 STSMs exchange visits of ECIs young researchers across countries(Y2, Q2, Y2,Q3, Y3, Q2)

M8. 2 TS for ECIs professional development and advancement of nurses in clinical practice, education and research (academe) (Y2, Q1 and Y3, Q1).

M9. Discussion paper: Importance innovative AACPs and innovative (joint) strategic positions to influence health care, education, academe and policy in Europe. (Y3 Q4)

M10. Policy paper: Importance of HI/HEI partnerships impacting health care and education. (Y4/Q2)

WG 4: Establishment of a Pan-European Postdoctoral Leadership program for PNs Strategic Leadership: Interventions & Programmes: Assessment

RC Objectives: Identification of empirically-based interventions to enhance leadership including strategic, policy leadership for PNs. Sub-objectives: a) To identify and analyse existing effective leadership strategies for PN's; b) To establish an online Pan-European Postdoctoral Leadership program for PNs, including workshops, meetings and mentoring trajectories focusing on effective leadership strategies; c) To encourage discussion and analysis of the underlying factors that need to be considered in program designs; d) To provide insight into the different criteria for the academic advancement of PN's working in academe.

Tasks of WG 4: Collection of information on effective strategies by conducting a scoping review on leadership strategies; focus group/individual interviews with successful nurse leaders who have developed into influential leadership positions (national/international board organizations), analyse and synthesize their experiences; explore criteria for (academic) advancement of PN's; in-depth discussion and analysis of the underlying factors that need to be considered in educational program design for PN's, building on steps above. Organization of (online) TS, Workshops, meetings; and writing scientific papers. The activities of WG 2: Workshops, meetings, TS, writing of scientific papers.

Milestones:

M4. 2 IWS discussing leadership strategies and programs exploring/discussing experiences of successful nurse leaders in academe (Y1, Q1,Q3)

M5. 2 IWS discussing different frameworks for academic advancement of PN (Y2, Q3,Q4).

M6. 2 IWS discussing assessments for leadership and career development of PNs (Y2, Q2,Q4).

M7. 3 STSM's exchange visits of ECR's across countries, shadowing nurse leaders (Y2, Q2,Y3, Q2).

M8. 2 TS ECI, nurses, nursing students: leadership clinical practice, education, research (Y3, Q1,Q3).

M9. Scientific paper on scoping/integrative review on successful interventions and programmes to enhance strategic, policy leadership to support PNs(Y3, Q2)

M10. Discussion paper on meet the experts focusing on strategic policy leadership in nursing (Y4, Q2)

WG 5: Inclusiveness, Dissemination & Public engagement

CB Objectives: a) Implement the Action policies on gender and geographical representativeness; Disseminate and transfer findings from the Action to the scientific community, the health community and the wider public. b) To identify new directions for research and research priorities within Europe as this Action will result in more international collaborations in research. c) To encourage the development of an international research consortium to prepare proposals beyond the lifetime of this Action on the feasibility and testing of new ideas on research in leadership and nursing in general. d) To create awareness about the importance of leadership in nursing and especially leadership of PN's and its' importance for the benefit of national health care and the entire society in European countries.

Tasks and activities

- a) Monitor the implementation of gender and geographical balance throughout the Action.
- b) Boost ECIs and ITCs participation and their inclusion in leadership positions
- c) Support the organisation of all events of the Action (TSs, STSMs, meetings, workshops)
- d) Coordinate the publication of scientific outputs to the scientific outputs to the scientific and healthcare community
- e) Define, implement and monitor online and offline strategies of dissemination to the wider public, and healthcare professionals.
- f) Create a network to foster knowledge exchange and dissemination of good practices at European and International level.

4.1.2 DESCRIPTION OF DELIVERABLES AND TIMEFRAME

The Action will lead to the following deliverables:

- Scientific papers: 4 scientific papers, 2 discussion papers, 3 policy paper, - all finalized by year 4.
- Conference presentations: 6 conference presentations 2 per year 2,3 and 4, - all finalized year 4.
- Action Website (from year 1) containing information on this Action, consortium, project description, project objectives, working groups, outputs and news.
- Training events: 18 international workshops (IWS); 8 Training Schools (TS) for early career investigators (ECI's), 6 short term scientific missions (STSM's) exchanging ECI's between partnering institutions. Course material made available open source through the Action's website.

Table 2. Workgroups, Deliverables and timeframe

WG	Deliverable	Description	Year/quarter
1	1.1	One scientific International peer-reviewed paper on the status of PN's Europe	Y4/Q1
	1.2	One scientific paper on doctoral education in Europe	Y4/Q3
	1.3	Policy paper/advise on improving the position of postdoc nurses within Europe	Y4/Q3
2	2.1	One Scientific paper on the development of the competency framework	Y3/Q4
	2.2	One policy paper reporting on the development of the competency framework	Y4/Q2
3	3.1	One discussion paper on the importance innovative AACPs & joint positions	Y4/Q2
	3.2	One policy paper informing policy on the importance of HI/HEI partnerships	Y4/Q4
4	4.1	One scientific paper on scoping/integrative review on leadership programmes	Y3/Q2
	4.2	Discussion paper on meet the experts on strategic policy leadership in nursing	Y4/Q4

4.1.3 RISK ANALYSIS AND CONTINGENCY PLANS

In order to visualise and monitor risks, a risk register will be set up at the start of the Action, where initially identified risks are included (see below). This register will be updated as new risks are identified. Emerging risks will be reviewed at every Action MC meeting. If at any point risks concerning something of high gravity and probability are identified, the Action Chair will immediately be informed and will consult with the Action MC meetings about managing the risk.

Table 3 Risk and contingency plans

Description of risk	Probability/gravity	Mitigation strategies and contingency plans
Differing points of view on nursing between the European countries and differences in understanding the role of nurses.	Probability: moderate/low Gravity: high	Monitoring: Active monitoring MC will emphasize that partners from different countries may have differing points of view on nursing and role of nurses; if this problem is identified; continuous monitoring, discussion, conflict management will be applied.
Team integration development is slow; conflicting visions on methods and goals; one of the partners leaves the consortium.	Probability: low Gravity: high	Inclusion: Active inclusiveness (WG5 Inclusion); prioritizing STSMs, particularly for ITC researchers, men, and ECI's researchers.
Divergent levels of engagement and involvement in the network could compromise unity, progress and added value	Probability: low Gravity: high	Unity: MC will facilitate regular meetings, intra-meeting communication, managing and coordinating across WGs. Core Group enable early identification of partners with insufficient involvement.

Major disputes within the working groups or network as a whole	Probability: low Gravity: high	Composition: MC will lay down procedures and mediate emerging disputes, drawing upon core members' extensive experience in interdisciplinary collaboration.
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1.1.4 GANTT CHART

D=Deliverables M=Milestones TS= training schools X= meeting		1				2				3				4			
meeting		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	1 MC meeting and coordination of all WG's	M															
	MC/TC/DC/WC/CC meetings	M		M		M		M		M		M		M		M	
	WG1-WG4 Meetings and minutes	M		M		M		M		M		M		M		M	
	WG1-WG4 Short Progress Reports	M		M		M		M		M		M		M		M	
WG1	Characteristics of PNs in Europe																
M1	8 Management Committee meetings assignment WG Chair	M		M		M		M		M		M		M		M	
M2	8 WG meetings (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M3	Short progress reports to MC (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M4	2 IWS discussing (preparation of surveys (Y1, Q1, Q3)	M		M													
M5	2 IWS discussing organisational factors PNs (Y1, Q2,Q4)		M		M												
M6	2 TS for ECR on methodological techniques (Y2, Q2; Q4) ;					M		M									
M7	Scientific paper on the characteristics of PNs(Y4,Q1)													M			
M8	Scientific paper on the doctoral nursing education (Y4, Q3)									M					M		
WG2	Competency Framework for PNs																
M1	8 MC-meeting assignment of all WG Chairs (Y1, Q1)	M		M		M		M		M		M		M		M	
M2	8 WG meetings (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M3	Short progress reports to MC (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M4	2 IWS identifying competencies (Y1, Q1,Q3)		M		M												
M5	2 IWS expert meeting (Y2, Q1,Q3).					M		M									
M6	2 TS for ECI on academic comp. (Y2, Q1 & Y3, Q1).					M		M									
M7	Scientific paper on competency framework (Y3, Q4)													M			
M8	Policy paper dev. competency framework (Y4,Q2)														M		
M9	M9. Policy paper importance of PNs for Health care (Y4, Q4).									M	M		M			M	
WG3	AACP and Joint Positions																
M1	8 MC-meeting assignment of WG Chairs (Y1, Q1)	M		M		M		M		M		M		M		M	
M2	8 WG meetings (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M3	Short progress reports to MC (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M4	2 IWS leadership programs (Y1, Q1,Q3)	M		M													
M5	2 IWS discussing frameworks for academic advancement of PN (Y2, Q3,Q4).							M	M								
M6	2 IWS instruments for leadership & career dev. (Y2, Q2,Q4).							M	M								
M7	3 STSM's exchange visits of ECI (Y2, Q2,Y3, Q2).							M				M					
M8	2 TS for ECI, leadership (Y3, Q1,Q3).									M		M					
M9	Scientific paper on review leadership to support PNs(Y3, Q2)										M						
M10	M10. Discussion paper strategic leadership in Ng (Y4, Q2)														M		
WG4	Leadership strategies & programmes																
M1	8 MC-meeting assignment of WG Chairs (Y1, Q1)	M		M		M		M		M		M		M		M	
M2	8 WG meetings (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M3	8 Short progress reports to MC (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M4	2 IWS leadership strategies and programs(Y1, Q1,Q3)	M		M													
M5	2 IWS academic advancement of PN (Y2, Q3,Q4)							M	M								
M6	2 IWS discussing instruments for leadership(Y2, Q2, Q4)							M	M								
M7	2 STSM's exchange visits of ECI(Y2, Q2,Y3, Q2).							M				M					
M8	2 TS for ECI on leadership (Y3, Q1,Q3).									M		M					
M9	Scientific paper leadership to support PNs(Y3, Q2)										M						
M10	Discussion paper strategic leadership in nursing (Y4, Q2)														M		
WG 5	Inclusiveness, dissemination and public engagement																
M1	8 MC-meeting assignment of all WG Chairs (Y1, Q1)	M		M		M		M		M		M		M		M	
M2	8 WG meetings (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M3	Short progress reports to MC (Y1-Y4, Q2 & Q4)	M		M		M		M		M		M		M		M	
M4	Publish the Action website			M													
M5	Reports of the Action global knowledge transfer, dissemination and exploitation activities									M							
M6	Report on the effectiveness of the Action strategies on inclusion, and geographical & gender policies												M				
M7	Roadmap for future funding														M	M	
Transversal activities																	
	Update Website internal	M															
	Update Website public																
	International conference																

Legend
 Working Groups M= Milestone, X= WG Meeting
 Deliverables
 MC Meetings

References

State of the World's Nursing 2020: Investing in Education, Jobs and Leadership. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO.

All-Party Parliamentary Group on Global Health Report (APPG) (2016). Triple Impact: how developing nursing will improve health, promote gender equality and support economic growth; London.

OECD. Health at Glance, 2017. OECD Indicators. OECD Publishing, Paris. (2017).

The Global Advisory Panel on the Future of Nursing & Midwifery (GAPFON®) Report. (2017). Indianapolis, Indiana: Sigma Theta Tau International.

EU, 2011; ERA; <https://ec.europa.eu/info/research-and-innovation/strategy/era>

The European Academy of Nursing Science (EANS) <https://european-academy-of-nursing-science.com/>

Sigma Theta Tau International Honor Society of Nursing <https://www.sigmanursing.org/>

European Nurse Directors Association (ENDA) <http://enda-europe.com/>

European Federation of Nurse Educators (FINE EU) www.fine-europe.eu

American Association of Colleges of Nursing (2016). Advancing healthcare transformation: a new era for academic nursing. Washington: American Association of Colleges of Nursing.

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: the National Academies Press.

de Lange, W., et al. (2019). [Postdoctoral Nurses' Experiences With Leadership and Career Development: A Qualitative Study](#). *J. Nurs Scholarsh.* ;51 (6):689-698.

Aiken LH, Sloane DM, Bruyneel L, Griffiths P, Sermeus W. (2014) [Staffing and education of nurses and hospital mortality in Europe-Authors' reply](#). *Lancet*. 2014 Sep 6;384(9946):851-2. Aiken LH, Fagin CM.

Cummings, G. et al. Leadership styles and outcome patterns for the nursing workforce: A systematic review. *Int J Nurs Stud*.85;19–60 (2018).

Hafsteinsdóttir TB, et al (2017) [Leadership mentoring in nursing research, career development and scholarly productivity: A systematic review](#). *Int J Nurs Stud*. 6(75):21-34.

Hafsteinsdóttir TB, et al (2020) The Leadership Mentoring in Nursing Research (LMNR) program for postdoctoral nurses: a development paper. *J Nurs Scholarsh*. 2020 Jul;52(4):435-445.

The Nursing Leadership Educational Program for Doctoral Nursing Students and Postdoctoral Nurses (The Nurse-Lead) (2019). <http://www.nurselead.org/>

[Hafsteinsdóttir](#) et al., Leadership Mentoring in Nursing Research Program for Postdoctoral Nurses: A Development Paper [J Nurs Scholarsh](#). 2020 Jul; 52(4): 435–445.

Hafsteinsdóttir T.B., et al. Leadership in Nursing: Experiences from the Nordic Countries, Springer (2019: pg. 1-21)

Leino-Kilpi H. State of Nursing Science in Finland. In: Hafsteinsdóttir T.B., et al. Leadership in Nursing: Experiences from the Nordic Countries, Springer (2019: pg. 69-83)

Jónsdóttir H. State of Leadership in Nursing Science in Iceland. In: Hafsteinsdóttir T.B., et al. Leadership in Nursing: Experiences from the Nordic Countries, Springer (2019: pg. 131-149)

Carrick-Sen, et al. Transforming Health Care Through Clinical Academic Roles in Nursing Midwifery and allied health professions: A Practical Resource for Healthcare mLondon (2016).

Ausserhofer D, et al. RN4CAST consortium. [Prevalence, patterns and predictors of nursing care left undone in European hospitals: results from the multicountry cross-sectional RN4CAST study.](#) BMJ Qual Saf. 2014 Feb;23(2):126-35

Lahtinen P. et al. Nursing education in the European higher education area - variations in implementation Nurse Educ Today, 2014 Jun;34(6):1040-7. doi: 10.1016/j.nedt.2013.09.011.

Numminen O, et al. (2019) Nurse Lead Consortium. [Postdoctoral nursing researcher career: A scoping review of required competences.](#) Nurs Open. 2019 Sep 24;7(1):7-29. doi: 10.1002/nop2.367.

Staffileno B.A. et al. The Financial and Clinical benefits of a Hospital-Based PhD Nurse-Researcher Nursing Economics.31(4):194-197 (2013).

COST Mission and Policies

EuroNurseLead shares the COST's mission of bringing together participants committed to improve the leadership and positioning of postdoctoral nurses in Europe to jointly develop a broad Pan-European initiative connecting all national and local previous and ongoing activities. EuroNurseLead aims to ultimately contribute to bridging science, society and policy makers in each European country and in the EU community as a whole. Translation of evidence from science to policy is key for EuroNurseLead as real changes are required in the position of postdoctoral nurses at different levels in health care to ensure the distinctive nursing perspective is included in decision-making in European health care. The insights gained will have the full impact on patients, nurses and healthcare in general. The ultimate goal is to create an European-wide postdoctoral program supporting the leadership and positioning of postdoctoral nurses enabling them to positively influence European health care and policy at all levels. By bringing together top nursing scientists in the field of leadership, research, health care and education, EuroNurseLead will enable great breakthroughs in nursing science, through gaining insight into the number and working condition of postdoctoral nurses across Europe; developing competencies and competency framework, profiles for innovative advanced academic career pathways and joint positions and by establishing a Pan-European Leadership Academy for postdoctoral nurses including useful tools, and leadership strategies as well as a common agenda in research for the nursing field. In this way, EuroNurseLead contributes to strengthening European nursing research and brings it forward to the level of the established world leaders.

EuroNurseLead will contribute to the COST Mission by:

1. Creating a European network of postdoctoral nurses, nursing science researchers specially interested in leadership in nursing
2. Bringing together postdoctoral nurses, healthcare managers, health economists, psychologists and health and primary care policy makers to create powerful synergies
3. Translating research results into reports, best practices, guidelines and a roadmap suitable for direct implementation
4. Disseminating results to all relevant groups who can make a difference through specific channels, ranging from journal for academic nurses to policy briefs for WHO or the European Commission.

6. Including both senior, recognized academics as well as early career investigators, from 22 different European countries, emphasising the importance of balancing the traditional predominance of women in the field.
7. Ensuring that the best performing countries in Europe work together with countries that are behind in establishing partnerships between academe and health care and developing new advanced career pathways and positions for postdoctoral nurses, enabling them to positively influence decision and policy making positively impacting patient and health care outcomes.

7. Establishing a collaborative network of postdoctoral nurses working in academe, education and clinical practice in countries across Europe, to allow knowledge, resources and infrastructures to be shared, exploited and improved to deliver maximum benefits.
8. Connecting relevant European and International networks through collaboration with European Academy of Nursing Science (EANS), European Federation of Nurse Educators (FINE), European Nurse Directors Association (ENDA), Sigma Theta Tau International to boost leadership and research in nursing and health care, optimize resources and catalyse their findings to advance faster together towards a high-quality, sustainable and humane healthcare system.

The COST policy on Excellence and Inclusiveness is incorporated in EuroNurseLead through the diverse network and networking platforms with space for participants to get to know each other and build relationships that can translate into research collaborations, personnel exchanges between institutes and shared resources and materials. In this way, EuroNurseLead can improve the quality of the research for nursing researchers and researchers at a global level. In all the activities within EuroNurseLead balance of the participants is very important to ensure that none will be left behind in methods and strategies to enhance leadership development. First, Short Term Scientific Missions are aimed at early career investigators to learn how countries at the forefront are establishing partnerships between academe and health care and are actively setting up programmes that they can then introduce in their own countries. Second, to gather supports, male participation is very important, especially because the multidisciplinary staff surrounding nurses in hospitals and managerial positions are mostly males. Third, the Action's network is

geographically very inclusive, in terms of ITC countries and including members from two Non-Cost continents emphasising a reach well beyond Europe.

Altogether, EuroNurseLead is committed to expand collaborative opportunities for postdoctoral nurse researchers and do our part to fulfil the COST objectives. By encouraging postdoctoral nurse researchers from less research-intensive countries to take up leadership positions in their work environment as well as in this Action we hope to increase their visibility in front of the leading countries in the field of nursing science and leadership so that future initiatives will include researchers from every corner in Europe. In the end, we hope to trigger positive changes in the resources allocated for nursing research, to keep providing the empirical evidence to improve care for patients and families, to create hybrid positions, like clinician-academic positions for postdoctoral nurses and to create leadership positions for nurses in all spheres and thereby to strengthen nursing research and science, ensuring that the distinctive nursing perspective is included in decision-making in global health care. In hospital boards, research centres, teaching institutes, governmental organizations, politics; postdoctoral nurses should gain access to decision-making positions to guide the transformation of the future of healthcare. With that in mind, wider objectives include postdoctoral nurse researchers as key players to make health care efficient, accessible and sustainable. Lastly, EuroNurseLead aims to be just the starting point of natural and regular conversations between postdoctoral nurses, all health care professionals, health care executives and decision-makers to facilitate the exploitation of the results that will come out of this Action and from nursing science in general. As a topic that affects every single person, positive impact of improved leadership among postdoctoral nurses will benefit millions while empowering the largest health care work force and thereby impact the health of patients and families across the globe.

Network of Proposers - Features

COST Inclusiveness target countries

50.00 %

Number of Proposers

44

Geographic Distribution of Proposers

Country	ITC/ non ITC/ other	Number of institutions from that country	Number of researchers from that country	Percentage of the proposing network
Belgium	non ITC	3	3	6.82 %
Bosnia and Herzegovina	ITC	2	2	4.55 %
Croatia	ITC	2	2	4.55 %
Cyprus	ITC	3	3	6.82 %
Estonia	ITC	1	1	2.27 %
Finland	non ITC	3	4	9.09 %
Germany	non ITC	3	3	6.82 %
Iceland	non ITC	2	2	4.55 %
Ireland	non ITC	2	2	4.55 %
Latvia	ITC	2	2	4.55 %
Lithuania	ITC	1	1	2.27 %
Netherlands	non ITC	4	4	9.09 %
Norway	non ITC	1	1	2.27 %
Poland	ITC	1	1	2.27 %
Portugal	ITC	2	2	4.55 %
Slovenia	ITC	1	1	2.27 %
South Africa	other	1	1	2.27 %
Spain	non ITC	1	1	2.27 %
Sweden	non ITC	2	2	4.55 %
Turkey	ITC	1	1	2.27 %
United Kingdom	non ITC	3	3	6.82 %
United States	other	2	2	4.55 %

Gender Distribution of Proposers

22.7% Males

77.3% Females

Average Number of years elapsed since PhD graduation of Proposers with a doctoral degree

15.9

Number of Early Career Investigators

10

Core Expertise of Proposers: Distribution by Sub-Field of Science

81.8% Health Sciences

11.4% Other medical sciences

4.5% Economics and business

2.3% Clinical medicine

Institutional distribution of Network of Proposers

84.1% Higher Education & Associated Organisations

9.1% Government/Intergovernmental Organisations except Higher Education

4.5% Private Non-Profit without market revenues, NGO

2.3% Business enterprise

Higher Education & Associated Organisations:37

- Number by Field of Science of Department/Faculty of Affiliation
Health Sciences:31
Other medical sciences:2
Clinical medicine:1
Economics and business:1
Medical biotechnology:1
Mathematics:1
- Number by Type
Research Oriented:20
Education Oriented:17
- Number by Ownership
Fully or mostly public:34
Fully or mostly private:3

Government/Intergovernmental Organisations except Higher Education:4

- Number by Level
Central and Federal Government:2
International:2
- Number by Type
Other Public Non-Profit Institution:3
Government department or government-run general public services:1

Business enterprise:1

- Number by Market sector of unit of affiliation
Human Health And Social Work Activities:1
- Number by Type
Public enterprises:1
- Number by Ownership and International Status
Enterprise owned by a national group:1
- Number by Size
Large company:1

Private Non-Profit without market revenues, NGO:2

- Number by Type
Advocacy/Membership Organization:2
- Number by Level
International or European:2

COST Country(20) : Belgium , Bosnia and Herzegovina , Croatia , Cyprus , Estonia , Finland , Germany

, Iceland , Ireland , Latvia , Lithuania , Netherlands , Norway , Poland , Portugal , Slovenia , Spain ,
Sweden , Turkey , United Kingdom

International Partner Country(2) : South Africa, United States

Near Neighbour Country(0)

European Commission or EU Agency(0)

European RTD Organisation(0)

International Organisation(2) : Belgium, United States

Network of Proposers - Details

Main Proposer's Details

Title:	Dr		
First Name:	Thóra	Gender:	F
Last Name:	Hafsteinsdóttir	Years from PhD:	17
Institution:	University Medical Center Utrecht	Type of Institution:	COST Country
Sub-field of Science of Department:	Health Sciences	Core Area of Expertise:	Health Sciences (Nursing)

Secondary Proposers' Details

Belgium

Prof Walter Sermeus (KU Leuven - Leuven Institute for Healthcare Management and Policy)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Health services, health care research

Gender: M

Years from PhD: 28

Prof Maria Filomena Gaspar (FINE - Europe - FINE [Nursing Educators])

Participating as Secondary Proposer

Core Expertise: Health Sciences: Nursing

Gender: F

Years from PhD: 14

Prof Gabriele Meyer (European Academy of Nursing Sciences)

Participating as Secondary Proposer

Core Expertise: Other medical sciences: Nursing Science

Gender: F

Years from PhD: 16

Bosnia and Herzegovina

Ms Darijana Antonic (Pan-European University Apeiron, College of Health Sciences - Pan-European University Apeiron)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Health services, health care research

Gender: F

Years from PhD: No PhD

Dr Ahmed Novo (Medical Faculty University of Sarajevo - Medical Faculty UNSA [Medical Informatics])

Participating as Secondary Proposer

Core Expertise: Health Sciences: Health services, health care research

Gender: M

Years from PhD: 6

Croatia

Dr Bojana Knezevic (University Hospital Centre Zagreb [Department for Quality in Healthcare])

Participating as Secondary Proposer

Core Expertise: Clinical medicine: Occupational Health

Gender: F

Years from PhD: 10

Dr Marcel Leppée (Institute for Healthy Ageing)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Public and environmental health

Gender: M

Years from PhD: 11

Cyprus

Dr Georgios Efstathiou (Ministry of Health)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Nursing

Gender: M

Years from PhD: 8

Prof EVRIDIKI PAPASTAVROU (CYPRUS UNIVERSITY OF TECHNOLOGY)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 15

Dr Andreas Charalambous (Cyprus University of Technology)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: M
Years from PhD: 12

 **Estonia**

Dr Saima Hinno (Tartu Health Care College)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Health services, health care research
Gender: F
Years from PhD: 8

 **Finland**

Prof Helena Leino-Kilpi (University of Turku)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 30

Dr Minna Stolt (University of Turku [Department of Nursing Science])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 7

Mr Jouko Katajisto (University of Turku [Department of Mathematics and Statistics])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Applied mathematics, statistics, non-computational modeling for health sciences
Gender: M
Years from PhD: 28

Prof Riitta Suhonen (University of Turku)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 18

 **Germany**

Prof Ansgar Wübker (Hochschule Harz [Economics])

Participating as Secondary Proposer
Core Expertise: Economics and business: Econometrics, statistical methods applied to economics
Gender: M
Years from PhD: 12

Dr Dörte Heger (RWI - Leibniz Institute for Economic Research)

Participating as Secondary Proposer
Core Expertise: Economics and business: Health Economics
Gender: F

Years from PhD: 6

Ms Iris Meyenburg-Altwarz (European Nurse Directors Association [Board of Directors])

Participating as Secondary Proposer

Core Expertise: Other medical sciences: Nursing Management, Leadership and Innovation

Gender: F

Years from PhD: No PhD

 **Iceland**

Prof Helga Jonsdottir (University of Iceland [School of Health Sciences])

Participating as Secondary Proposer

Core Expertise: Other medical sciences: Nursing

Gender: F

Years from PhD: 25

Prof Herdis Sveinsdóttir (University of Iceland, Faculty of Nursing)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Nursing

Gender: F

Years from PhD: 20

 **Ireland**

Dr Anne-Marie Brady (Trinity College Dublin)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Health services, health care research

Gender: F

Years from PhD: 10

Prof Thomas Kearns (Royal College of Surgeons in Ireland University of Medicine and Health Sciences [Faculty of Nursing and Midwifery])

Participating as Secondary Proposer

Core Expertise: Other medical sciences: Nursing Health Policy

Gender: M

Years from PhD: 6

 **Latvia**

Dr Kristaps Circenis (Rīga Stradiņš University)

Participating as Secondary Proposer

Core Expertise: Health Sciences: Nursing

Gender: M

Years from PhD: 7

Dr Agita Melbarde-Kelmere (Riga Stradins University [Nursing])

Participating as Secondary Proposer

Core Expertise: Health Sciences: Health services, health care research

Gender: F

Years from PhD: 3

 **Lithuania**

Prof Natalja Fatkulina (Vilnius University - Vilnius University Medical Faculty [Institute of Health Sciences])

Participating as Secondary Proposer

Core Expertise: Health Sciences: Social biomedical sciences (including family planning, sexual health, psycho-oncology, political and social effects of biomedical research)

Gender: F

Years from PhD: 9

 **Netherlands**

Prof Lisette Schoonhoven (University Medical Center Utrecht [Julius Center])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 17

Ms Lisa van Dongen (UMC Utrecht [Nursing Science])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: No PhD

Dr Nienke Bleijenberg (University of Applied Sciences Utrecht - Nursing Institute [Healthy and Sustainable Living])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 7

 **Norway**

Prof Marit Kirkevold (Oslo Metropolitan University [Institute of nursing and health promotion])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 31

 **Poland**

Prof Izabella Uchmanowicz (Wroclaw Medical University)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 12

 **Portugal**

Prof Maria Adriana Henriques (Escola Superior de Enfermagem de Lisboa [Department of Comunity Health])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 9

Prof Andreia Costa (Escola Superior de Enfermagem de Lisboa [Departamento de Enfermagem de Saúde Comunitária])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 7

 **Slovenia**

Prof Majda Pajnkihar (University of Maribor [Faculty of Health Sciences])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 16

 **South Africa**

Prof Siedine Coetzee (North-West University [School of Nursing Science])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 10

 **Spain**

Ms Adela Zabalegui (HOSPITAL CLÍNIC DE BARCELONA [Nursing on Research and Education])

Participating as Secondary Proposer
Core Expertise: Other medical sciences: Nursing
Gender: F
Years from PhD: 23

 **Sweden**

Prof Ingalill Rahm Hallberg (Lund University [Departement of health sciences])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 30

Prof Tiny Jaarsma (University of Linkoping - Linkoping University)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 21

 **Turkey**

Dr Zeliha Tulek (Istanbul University-Cerrahpasa - Istanbul University-Cerrahpasa [Florence Nightingale Faculty of Nursing])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 14

 **United Kingdom**

Prof Brendan McCormack (Queen Margaret University Edinburgh [School of Health Sciences])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: M
Years from PhD: 23

Prof Sue Latter (University of Southampton - School of Health Sciences)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 26

Prof Anne Topping (University of Birmingham - University of Birmingham [Institute of Clinical Sciences - School of Nursing])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 19

 **United States**

Dr Elizabeth Madigan (Sigma Theta Tau International Honor Society of Nursing)

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 24

Dr Marion Broome (Duke University [School of Nursing])

Participating as Secondary Proposer
Core Expertise: Health Sciences: Nursing
Gender: F
Years from PhD: 36