InteropEHRate

EHR in people's hands across Europe

Annexe I

The InteropEHRate Project Explained to the Nursing Profession

READ MORE
Some references

Lesson 1

EFN Presentation

The European Union, What's in it for me?

Paul De Raeve, 2017

This book offers nurses a valuable and insightful resource into the politics and strategic direction of health policy that shapes frontline nursing and midwifery practice in the EU.

Read the book ONLINE :
https://online.anyflip.com/eumpx/ssim/mobile/index.html

The EU faces many challenges. Nurses and nursing are part of the solution. It looks like the EU citizens have enough of the nice talks of politicians, enough of their political promises prior election. Therefore, it is important civil society, nurses ask themselves in which world they want to live and work; how nursing need to push for change in the changing world; and what should be in for nurses who provide daily care for the most vulnerable in our complex society. But when moving forward, the main question for many citizens will be: the EU, what's in it for me? Indeed, since 2008, when the financial crisis hit ordinary EU citizens very hard, especially nurses and women, more challenges to daily survival started to surface. Is the EU, its institutions, its political games, just a complex political labyrinth nobody wants to understand? Are EU civil servants simply producing legislation in view of their own created cocoon, far away from daily reality? But how can we bring ordinary EU citizens closer to the European project, its solutions? Nurses, women, play a key role in making the EU, health & wellbeing, prosperity and peace work for Eu citizens, trusting nurses most!

EU Future Trust

Paul De Raeve

The European Union, what's in it for me?

As Registered Nurse (1984), Master Nursing Science (1989-VUB) and Statistics (1996-KUB), followed by his PhD at Kings College London (2014), Paul became EFN Secretary General from 2002, lobby the EU Commission, Parliament and Council and recently (2016) started designing within the ENRF a nursing research and innovation agenda.

978-3-330-03381-8

De Raeve

LAMBERT Academic Publishing

EU Lobby Strategies Fitting a New Political Context

Paul De Raeve, 2017

This book builds on concrete achievements of the nursing community, its leaders to move the European political agenda, to advance nursing in such a way that it delivers concrete benefits for EU citizens.

Read the book ONLINE :

https://online.anyflip.com/eumpx/ugmb/mobile/index.html

The changing EU economic and political context implies adapting to this changing environment, including our lobby strategies to pro-actively set the nursing agenda. The EU institutions, its political machinery, has become a complex political labyrinth in which public consultations are not enough to build trust with its citizens. Putting civil society into the cloud to meet and produce statement is the new window dressing which does not facilitate the design of a social Europe. This book is building on concrete achievements of the nursing community, its leaders to move the European political agenda, to advance nursing in such a way that it delivers concrete benefits for EU citizens. The nurses' European project, be it political, professional, scientific, is a movement built since 1967, when the Commission started drafting the free movement Directive. EU legislation protected and stimulated the development of nursing as a profession. However, as lobby strategies are drying up, civil society being excluded from policy design, we need to reflect on how to influence better EU politics and policies. The world changed in 2017 and more changes are to come, for the better, the worse!

As Registered Nurse (1984), Paul has a Master in Nursing Science (1989-VUB) and Statistics (1996-KUB) and a PhD from Kings College London (2014), being the first EFN Secretary General since 2002, lobbying the EU Commission, Parliament and Council on behalf of 3 million nurses in the EU. Paul focusses on developing EFN and ENRF in synergy.

Paul De Raeve

Paul De Raeve - EU Lobby Strategies

EU Lobby Strategies Fitting a New Political Context

De Raeve

978-3-330-04870-6

LAMBERT Academic Publishing

Building & Sustaining a Resilient EU Nursing Workforce & Healthcare

The future of the European Union – Nurses Impact

Paul De Raeve, 2021

This book shows that more than ever, it is crucial for nurses to engage and proactively contribute to EU health and social policies, in the complex and challenging society we operate in as frontline healthcare professionals.

See here :
https://www.lap-publishing.com/catalog/details//store/gb/book/978-620-4-20948-7/building-sustaining-a-resilient-eu-nursing-workforce-healthcare

Lesson 2

EFN & EU LAW

Directive 2013/55/EU
amending Directive 2005/36/EC on the recognition of professional qualifications

This Directive aims to consolidate and modernise the rules regulating the mutual recognition of professional qualifications in the EU Member States, including for general care nurses.

To read the Directive:
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0055

EFN Competency Framework

Approved by the EFN members in April 2015, the EFN Competency Framework describes the competences required to nurses responsible for general care, aiming at being used by the National Nurses Associations to encourage and guide the nursing schools at national level to implement the competences listed under Article 31 of the Directive.

Read it here:

http://www.efnweb.be/?page_id=6897

EFN Guideline for the implementation of Article 31 of the Mutual Recognition of Professional Qualifications Directive 2005/36/EC, amended by Directive 2013/55/EU

EFN Competency Framework
Adopted at the EFN General Assembly, April 2015, Brussels

EFN

EFN Workforce Matrix 3+1

Approved by the EFN Members in May 2017, the EFN Workforce Matrix 3+1 includes information on education, qualifications and competences for each category, and shows the commonalities and differences of the three categories and the HCAs among 35 EU countries.

Read it here:

http://www.efnweb.be/?page_id=8220

EFN Workforce Matrix 3+1

3 Categories

General care nurse – DIR55

Specialist nurse

Advanced Practice Nurse

+ 1 — • The future principles for the development of Health Care Assistants

European Pillar of Social Rights

The European Pillar of Social Rights is about better delivering on rights for citizens by building on 20 key principles. Of these 20 principles, the EFN follows 4: Principle 1 (Education); Principle 6 (Wages); Principle 16 (Healthcare); Principle 18 (Long-term care).

See it here :
https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

European Pillar of Social Rights Action Plan

The European Pillar of Social Rights Action Plan sets out concrete initiatives to turn the European Pillar of Social Rights into reality. It proposes headline targets for the EU by 2030.

See it here :

https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-action-plan_en

Multiannual Financial Framework 2021-2027

See it here:
https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027_en

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NextGenerationEU

See it here:
https://ec.europa.eu/info/strategy/recovery-plan-europe_en#nextgenerationeu

Both supporting the recovery plan for Europe. It includes the new EU budget structure, funding programmes, allocations per Member States, and data on spending and revenue.

National Recovery and Resilience Plans

The links contain all relevant country-specific information, such as the recovery and resilience plans and key points about them, and where available, the legal texts approving the plan and accompanying press material.

See it here:
https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#national-recovery-and-resilience-plans

Recovery and Resilience Facility

Aiming to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions.

See it here:

https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en

Recovery and Resilience Scoreboard

The Recovery and Resilience Scoreboard gives an overview of how the implementation of the Recovery and Resilience Facility (RRF) and the national recovery and resilience plans is progressing.

See it here:

https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/

European Semester - Country Specific Recommendation (2016-2020)

Country-specific recommendations provide tailored advice to individual Member States on how to boost jobs, growth and investment, while maintaining sound public finances. The Commission publishes them every spring. They give guidance on what can realistically be achieved in the next 12-18 months to make growth more sustainable, inclusive and stronger.

Read it here:

https://ec.europa.eu/info/publications/2020-european-semester-country-specific-recommendations-commission-recommendations_en

EUROPEAN COMMISSION

Brussels, 20.5.2020
COM(2020) 520 final

Recommendation for a

COUNCIL RECOMMENDATION

on the 2020 National Reform Programme of Austria and delivering a Council opinion on the 2020 Stability Programme of Austria
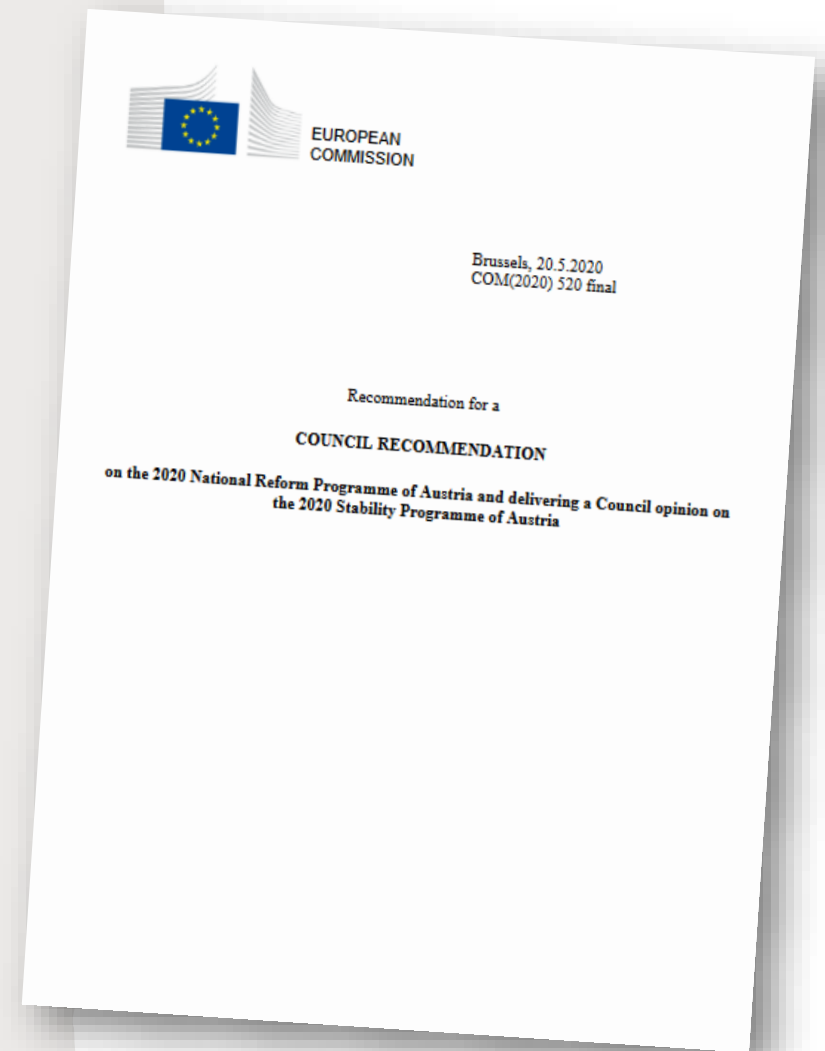
EFN Policy Statement on the EU Semester

Approved by the EFN Members in October 2016, this EFN Policy Statement is calling on the national and European policy-makers to acknowledge the importance of investing in health, with a more efficient health and social care funding allocation and better working conditions for the nursing workforce, building on existing integrated care ecosystems throughout the EU.

Read it here:

http://www.efnweb.be/wp-content/uploads/EFN-Position-Paper-on-Nurses-Contribution-to-European-Semester.pdf

EFN POSITION PAPER ON
NURSES CONTRIBUTION TO EUROPEAN SEMESTER

By the end of 2020 the EU wants to have achieved its growth strategy leading to smart, sustainable and inclusive growth in the areas of employment, research and development, climate, energy, education, social inclusion and poverty reduction. Challenges in different sectors but particularly in those related to health and social care lead to a disruptive restructuring, envisaging efficiency and sustainable solutions. Although the Member States have an extensive freedom in organising their health and social care systems, the European Union helps Member States to achieve the abovementioned goals by analysing the state of play of the ecosystem and bring in recommendations to improve the performance of the health and social care system. These are covered by the Country Specific Recommendations of the European Semester, which year by year puts different recommendations for all Members States in the spotlight.

However, every single Member State is or will be struggling with the societal challenges if healthcare remains isolated from the social sector, and stays disease specific and medically dominated. All countries need to set a series of political priorities that reshuffle investments towards building a health and social ecosystem with a strengthened community care. Bringing care back to the community will be the main challenge in the coming years to reach a resilient health and social care ecosystem.

The EFN therefore advises national and European policy-makers, drafting input to the Commission, leading to Country Specific Recommendations, to acknowledge the importance of investing in health, with a more efficient health and social care funding allocation, better working conditions for the nursing workforce, especially frontline, building on existing integrated care ecosystems throughout the EU.

During the past five years, the EFN has been working in different sectors that contribute to the sustainability of health and social ecosystems. Firstly, on educa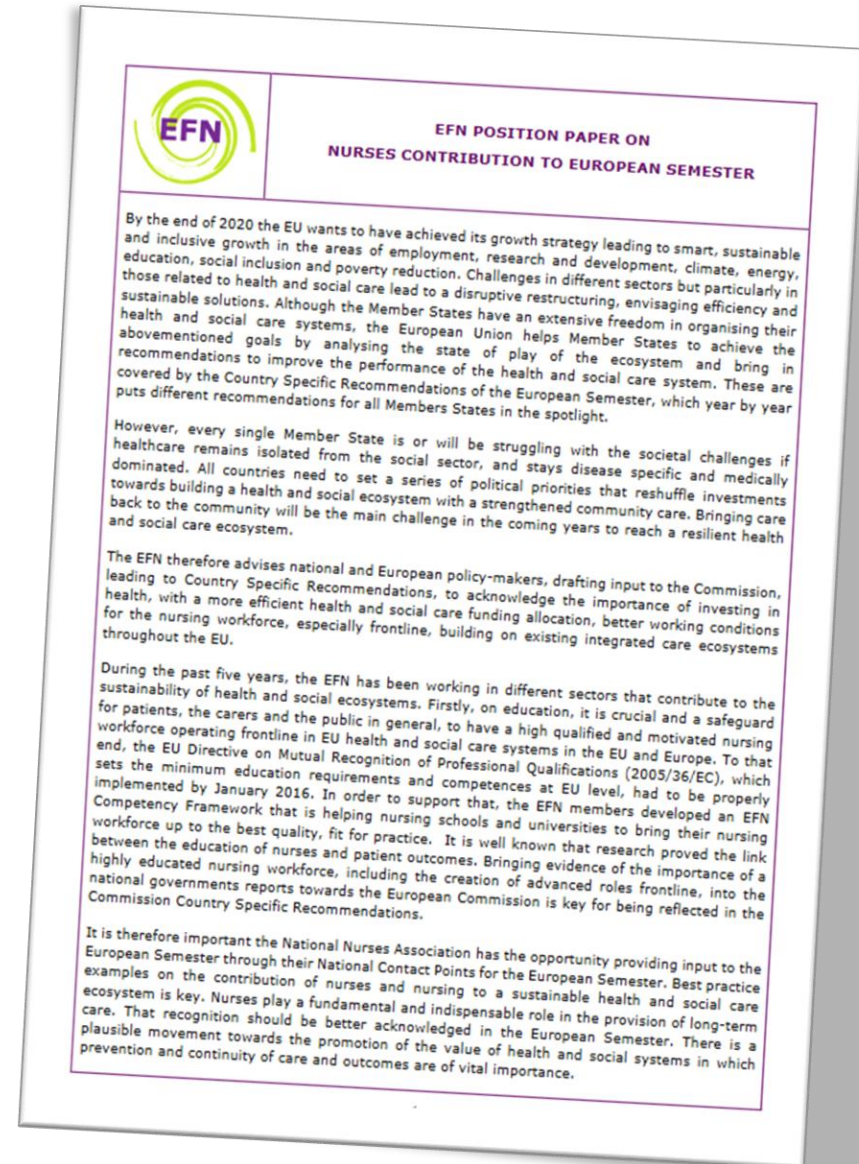tion, it is crucial and a safeguard for patients, the carers and the public in general, to have a high qualified and motivated nursing workforce operating frontline in EU health and social care systems in the EU and Europe. To that end, the EU Directive on Mutual Recognition of Professional Qualifications (2005/36/EC), which sets the minimum education requirements and competences at EU level, had to be properly implemented by January 2016. In order to support that, the EFN members developed an EFN Competency Framework that is helping nursing schools and universities to bring their nursing workforce up to the best quality, fit for practice. It is well known that research proved the link between the education of nurses and patient outcomes. Bringing evidence of the importance of a highly educated nursing workforce, including the creation of advanced roles frontline, into the national governments reports towards the European Commission is key for being reflected in the Commission Country Specific Recommendations.

It is therefore important the National Nurses Association has the opportunity providing input to the European Semester through their National Contact Points for the European Semester. Best practice examples on the contribution of nurses and nursing to a sustainable health and social care ecosystem is key. Nurses play a fundamental and indispensable role in the provision of long-term care. That recognition should be better acknowledged in the European Semester. There is a plausible movement towards the promotion of the value of health and social systems in which prevention and continuity of care and outcomes are of vital importance.

EFN Report on European Semester Analysis 2016-2020

This EFN report is analysing 2020 in comparison with previous European Semesters & Country Reports (2016-2019) and selecting the relevant information for nurses, nursing and healthcare. The aim of this EFN Report is to be a compilation of all the European Commission's Country Reports entries related to nursing and/or healthcare, for each EU Member State, providing a unique insight in the capacity of the EU healthcare systems. Measures taken by one country that were successful are likely to inform initiatives for improving the healthcare situation in another country.

Read it here:

http://anyflip.com/eumpx/ytok/

EFN Report on European Semester
Country Reports Analysis
2016-2017-2018-2019-2020

Directive on Patients' Rights in Cross-Border Healthcare (2011/24/EU)

This Directive created a legal framework for the patient's right to seek healthcare in another Member State and to be reimbursed; and provides a legal basis for European cooperation in key areas of healthcare: quality and safety, Health Technology Assessment and eHealth, and rare diseases.
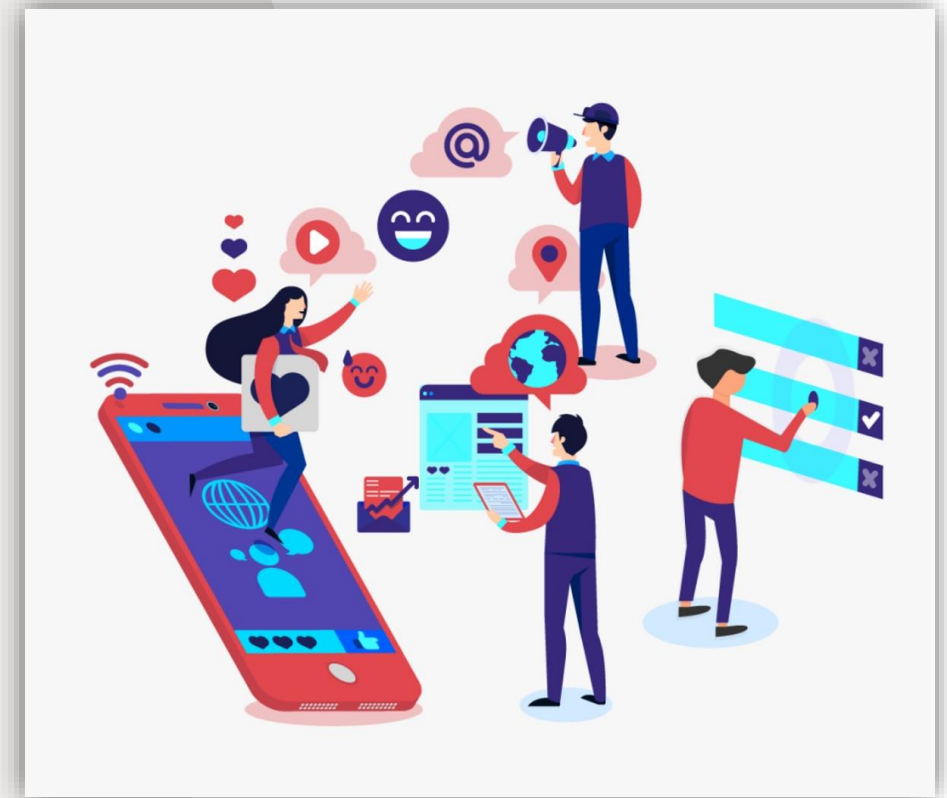
Read it here:
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011L0024
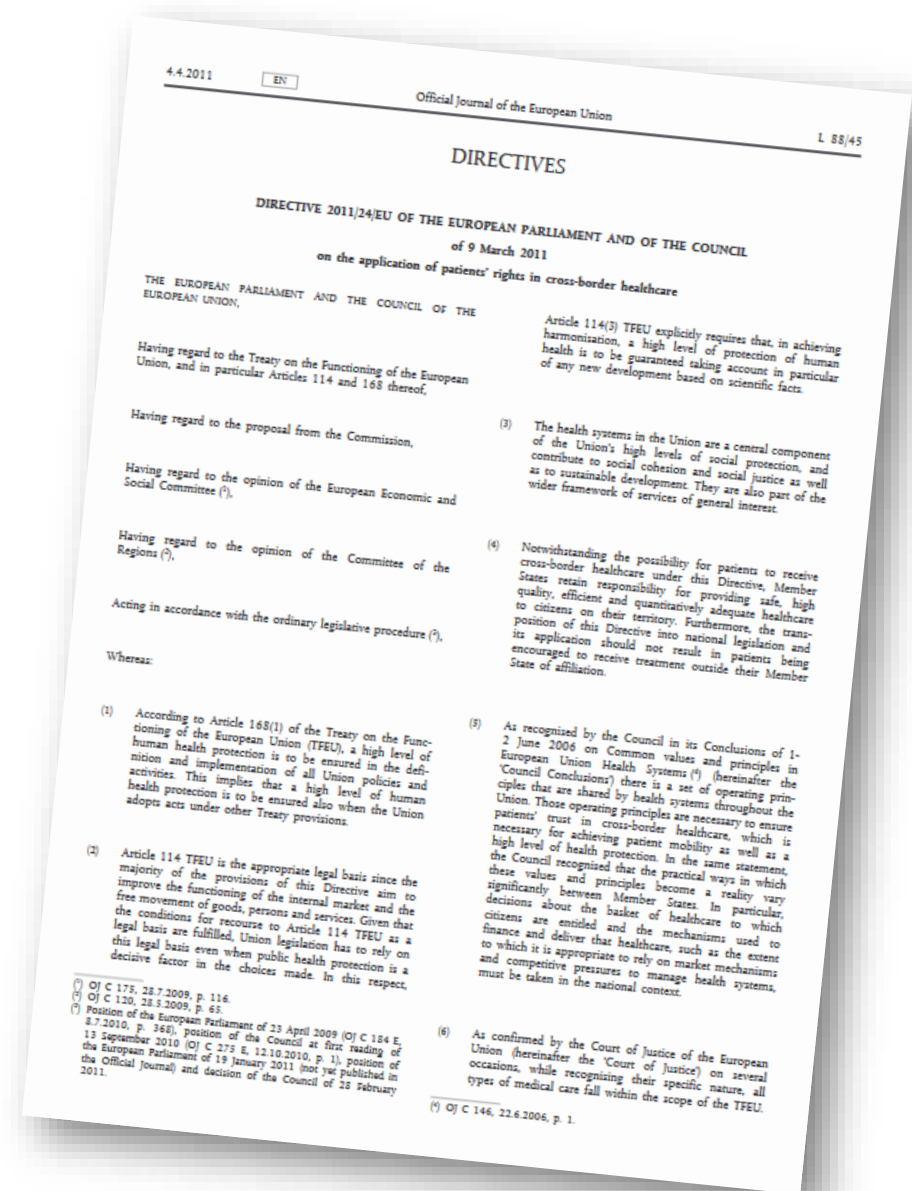
European Health Data Space (EHDS)

The European Health Data Space is a health specific ecosystem comprised of rules, common standards and practices, infrastructures and a governance framework that aims at empowering individuals through increased digital access to and control of their electronic personal health data, at national level and EU-wide, and support to their free movement, as well as fostering a genuine single market for electronic health record systems, relevant medical devices and high-risk AI systems. It also aims at providing a consistent, trustworthy and efficient set-up for the use of health data for research, innovation, policy-making and regulatory activities.

See here:

https://health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space_en

The world of cloud-based services: storing health data in the cloud
Paul De Raeve, 2019

This article provides an insight into the world of 'cloud'.

Read it here :
https://www.healtheuropa.eu/cloud-based-services-storing-health-data-in-the-cloud/93053/

The Blockchain Interoperability - Sharing data across the care continuum
Paul De Raeve, 2019

This article provides an overview on how blockchain interoperability is enabling sharing data across the care continuum.

Read it here :
http://www.efn.eu/wp-content/uploads/Blockchain-Interoperability-Sharing-data-accross-the-care-continuum.pdf

BLOCKCHAIN INNOVATION

Blockchain interoperability: Sharing data across the care continuum

Paul De Raeve, Secretary General of the European Federation of Nurses Associations (EFN) sheds lights on how blockchain interoperability is enabling sharing data across the care continuum

The interoperability of electronic health records (EHR) in Europe is key, especially now the European Commission plans to publish a recommendation on the technical specifications for an EHR exchange format. Although the EHR exchange format is part of a bigger plan of the digital transformation of the health and social care in the Digital Single Market, the EU financing of two H2020 projects, 'Smart4Health' and 'InteropEHRate' can lead to large-scale interoperable designs, especially at a time when a variety of government agencies are moving their infrastructure on to new technologies offering optimum security and data privacy. The policy outcome, adopting an EHR exchange format at EU level, could end the endless and costly interoperability discussion we have had for the last two decades. Despite some advancements towards more seamless interoperability in the healthcare sector, frontline deployment of continuity of care, based on data sharing in clinical care pathways, could benefit more from new IT developments.

Although called 'disruptive', we recognise these new systems compete for market shares struggling to make a business case for sharing the data they've gathered, sorted, collected, aggregated and secured. Therefore, it becomes key that the IT industry, the EHR vendors become connected to the frontline practitioner so products become co-designed, fit-for-purpose, reduce the endless hours nurses spend on data entry, leading to a general malaise towards software solutions that were supposed to help, but it really just means more work for the frontline. So, it becomes high time to get interoperability right!

Co-designing interoperable solutions
A favourable ecosystem of trust and political support to use blockchain as a way to tackle interoperability is

not the main challenge, but what we miss are the practical use cases showing blockchain works better for the frontline due to solving the interoperability challenges we currently have in the healthcare ecosystem.

It is argued that blockchain makes it possible to exchange data from different sources, in different formats, among the end-users, at their fingertips to plan and provide frontline healthcare. Within this context, nurses have an opportunity to co-design an EU interoperable EHR as end-users, respecting the existing national EHR developments. Therefore, EFN partnership in the H2020 granted EU projects focusses on co-designing a fit-for-purpose interoperable EHR, aiming to prototype:

- A citizen-centred implementation of a platform that can be integrated with a federated platform structure, easy-to-use and secure, constantly accessible and portable within any other Member States of the EU and;

- A data-driven platform to help the scientific community to benefit from the user-generated data (health, care, and health-related) going beyond the currently established interoperability level.

Nurses are in the unique and privileged position in co-designing interoperable solutions as they have direct access to the daily care needs of people and have an in-depth knowledge of the patients' experiences and contextual environments in which the continuity of care takes place. As nurses are central in empowering citizens/patients to have access to health and social services, they play a significant role in addressing trust and ensure the appropriate allocation of nursing data in the EHR to facilitate continuity of care and as such, to ensure better health outcomes.

Digital transformation of healthcare for the patient
Paul De Raeve, 2021

The article considers the importance of digital transformation to support high-quality patient healthcare.

Read it here:
http://efn.eu/wp-content/uploads/2022/05/Digital-transformation-of-healthcare-for-the-patient.pdf

ENRF Policy Brief on Digitalisation

Published in April 2021, by the European Nursing Research Foundation (ENRF), this Policy Brief shows that digitalisation of the healthcare sector has the potential to ease frontline nurses' daily workload and reduce administrative tasks; in doing so, it creates opportunities for nurses to spend more time with, and focused on, patients.

Read it here:
http://www.enrf.eu/wp-content/uploads/2021/04/ENRF-Evidence-Based-Policy-Brief-on-Digitalisation-April-2021.pdf

Lesson 3

Interoperability

eHealth Stakeholder Group Policy Paper on Interoperability
(EFN & HOPE)

This Policy Paper brings together insights from the eHealth Stakeholder Group to explore the question: "which concrete solutions do we identify, and actions could we take, to promote cross-border access to health data and interoperability?", with the co-creation of data spaces and electronic health records as common agenda topics, and the role of the frontline health workforce to make it all happen frontline.

Read it here:

http://efn.eu/wp-content/uploads/2022/07/EFN-lead-eHSG-WG1-Policy-Paper-on-Interoperability-Nov-2021.pdf
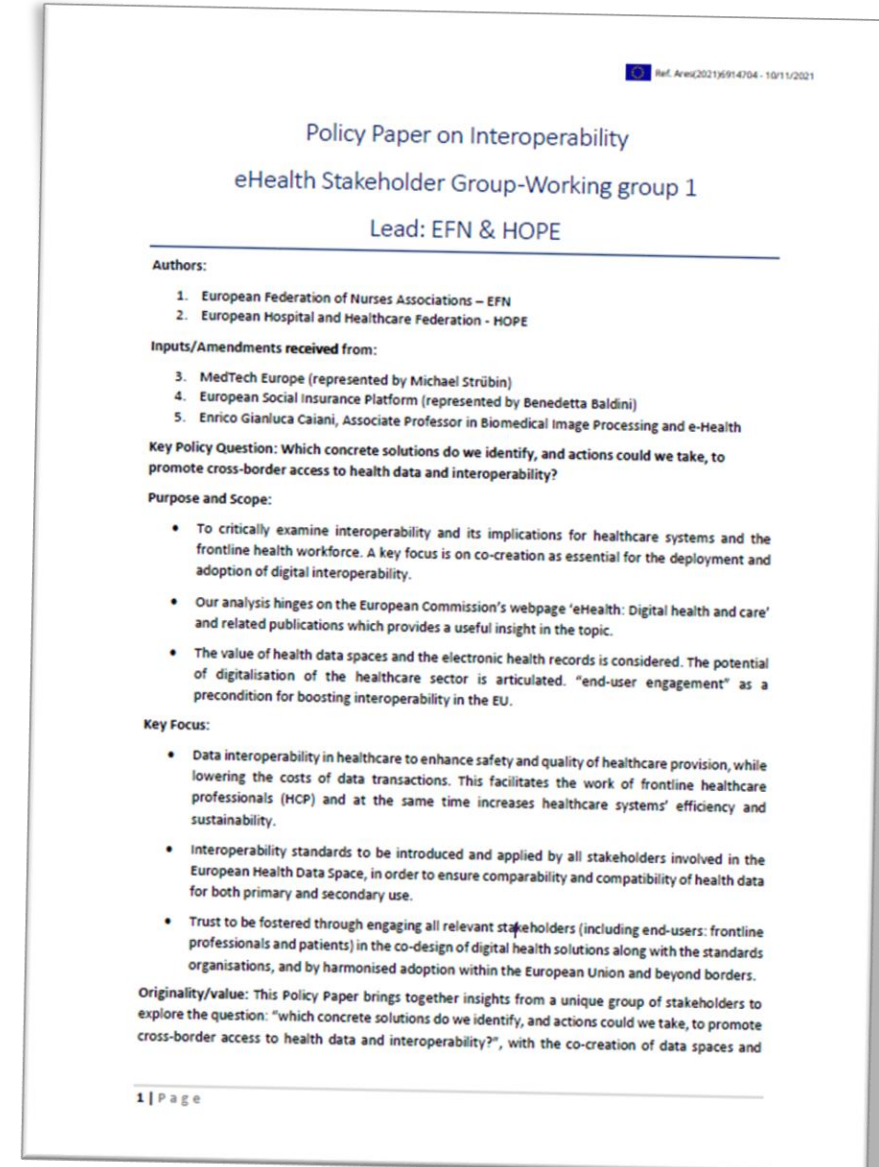
FHIR (HL7)

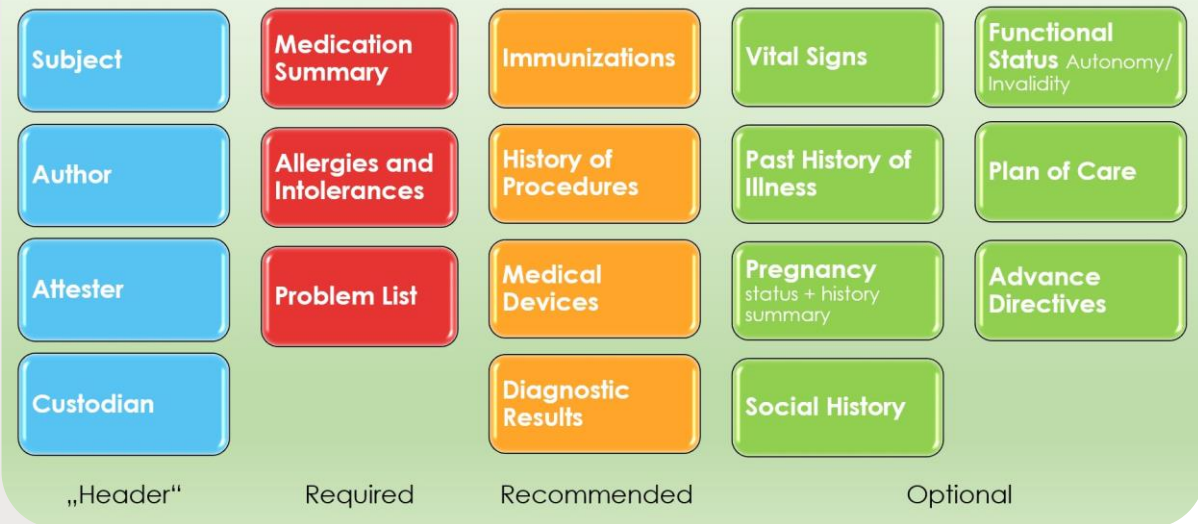*FHIR (Fast Health Interoperability Resources) is an HL7 specification for Healthcare Interoperability.*

See here:
https://www.fhir.org/

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International Patient Summary (IPS)

The HL7 International Patient Summary (IPS) is an electronic health record containing essential healthcare information intended for use in unscheduled, cross-border care scenarios.

See here:
http://hl7.org/fhir/uv/ips/

IPS Composition

"Header"	Required	Recommended	Optional	
Subject	Medication Summary	Immunizations	Vital Signs	Functional Status Autonomy/Invalidity
Author	Allergies and Intolerances	History of Procedures	Past History of Illness	Plan of Care
Attester	Problem List	Medical Devices	Pregnancy status + history summary	Advance Directives
Custodian		Diagnostic Results	Social History	

Lesson 4

What is InteropEHRate?

InteropEHRate EU Project

InteropEHRate aims to support peoples' health by opening them up new ways to make health data available where needed.

See it here:
https://www.interopehrate.eu/

InteropEHRate Deliverables

These are the milestones of the project on requirements, protocols, architecture, specifications, etc. submitted to the European Commission.

Read it here:

https://www.interopehrate.eu/resources/#dels

InteropEHRate White Papers

"Unleashing personal health data for care and research: The InteropEHRate approach" - gives an overview on how to enable a citizen-centric approach and what technical solutions is InteropEHRate developing.

"Real-world evidence in health and care research – The contribution of InteropEHRate" - explores the background to real-world data challenges in health and care and draws attention to the growing impetus of hybrid approaches to health and care data collection.

"Towards interoperable health data: The contribution of InteropEHRate" - provides an overview of the problems of data heterogeneity and interoperability and presents a solution based on an in-depth and exhaustive analysis of data, made possible through innovative semi-automated methodologies and tools developed in the framework of the InteropEHRate project.

Read it here:

https://www.interopehrate.eu/resources/#pubs

Citizen-centred approach to health data exchange
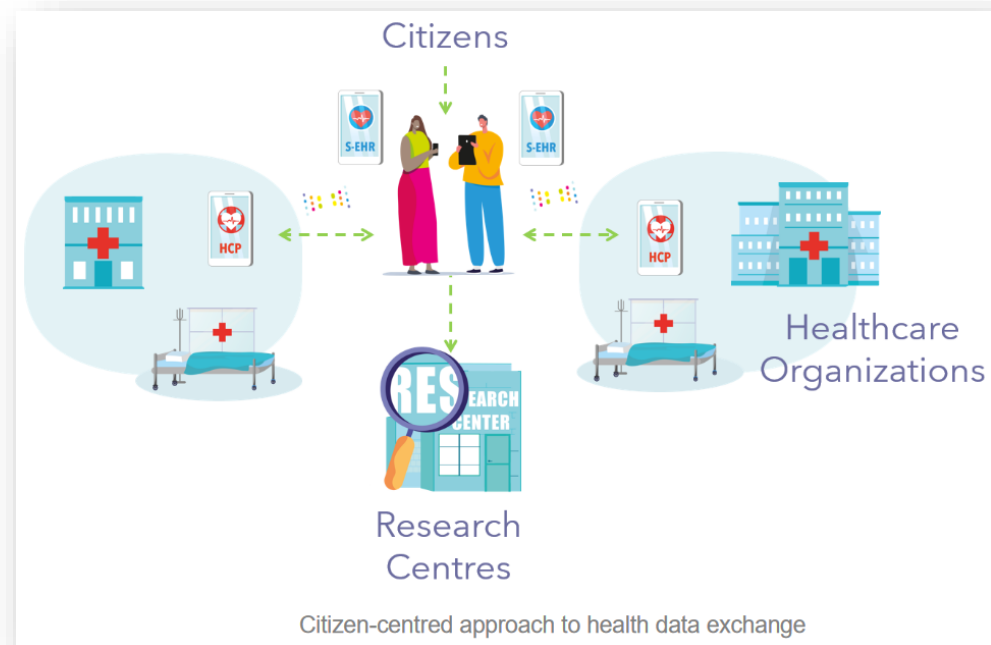
Lesson 5

IEHR Project Architecture
IEHR 3 scenarios

InteropEHRate Architecture

The "InteropEHRate standard architecture" specifies how different actors using applications offered by different vendors may interoperate for exchanging health data (coming from an EHR or from the person), thanks to open (vendor independent) communication protocols.

See here:

https://www.interopehrate.eu/wp-content/uploads/2021/09/InteropEHRate-D2.6-InteropEHRate-Architecture-V3.pdf
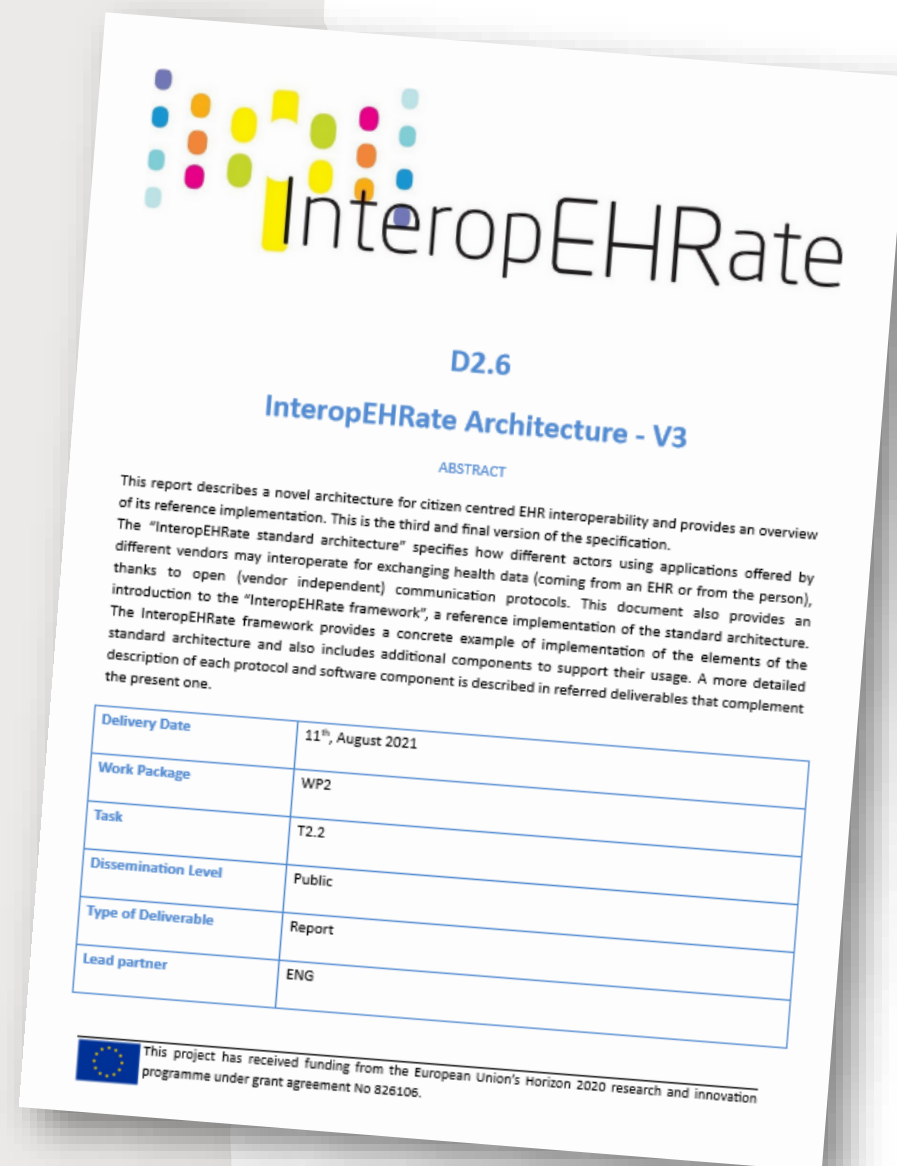
Device-to-device (D2D) protocol

Applied to the healthcare access scenario, the Device-to-device (D2D) protocol provides the citizen the ability to retrieve data stored in the National EHR, store data locally on a Smart EHR (S-EHR), exchange health data where no internet connection is available and travel all over the European Union with her medical data.

See here:

https://www.interopehrate.eu/blog/2020/07/20/d2d-protocol-update-july-2020/
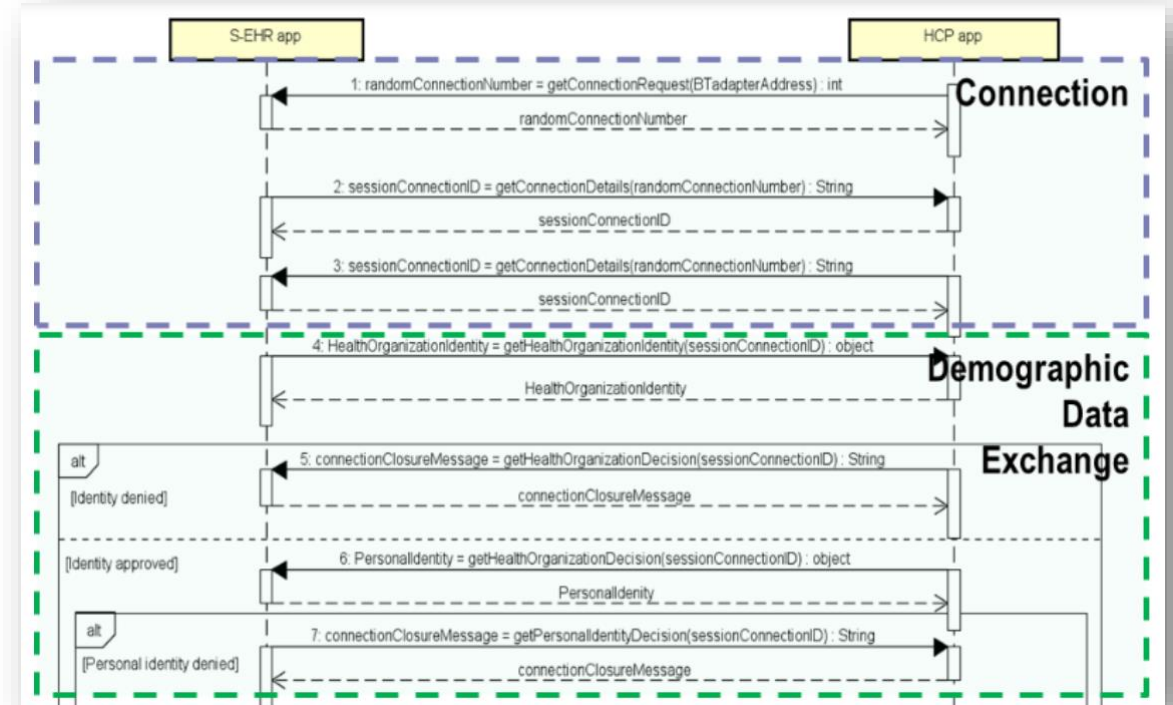
Lesson 6

IEHR Project Exploitation
& Governance

Exploitation & Dissemination

InteropEHRate Mid-term Public Workshop – October 2020
that presented how citizens can access and share their
personal health data with interopEHRate solutions.

Read it here:

https://www.interopehrate.eu/event/interopehrate-scenarios-and-data-flows-mid-term-public-workshop/
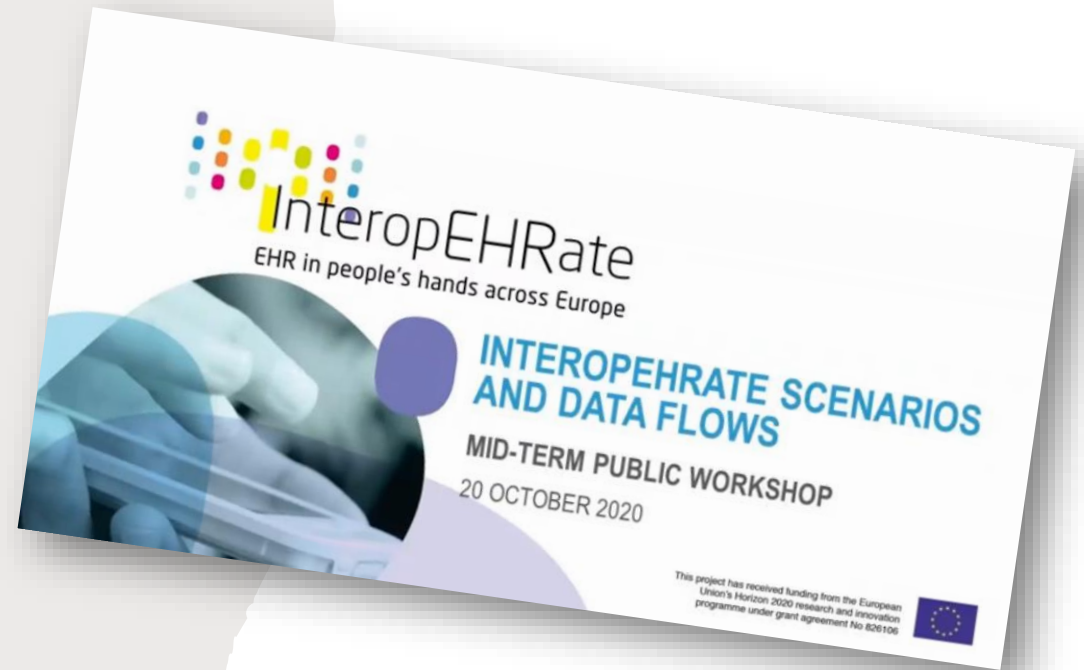
Leveraging the trust of nurses to advance a digital agenda in Europe: a critical review of health policy literature
Paul De Raeve at AI, 2021

This article is a critical and integrative review of health policy literature examining artificial intelligence (AI) and its implications for healthcare systems and the frontline nursing workforce. A key focus is on co-creation as essential for the deployment and adoption of AI.

Read it here:

https://open-research-europe.ec.europa.eu/articles/1-26/v2

Lesson 7

IEHR at the European Parliament
EFN Involvement in EU Projects

EFN Report on the Digitalisation Event at the European Parliament
05 February 2020

Digitalisation has a central place in the EFN lobby work, with a high-level event organised at the European Parliament in February 2020, focussing on 'European Electronic Health Records' thematic. This report gives an overview on the key outcomes of the EFN event.

Read it here:

https://anyflip.com/eumpx/bxrh/
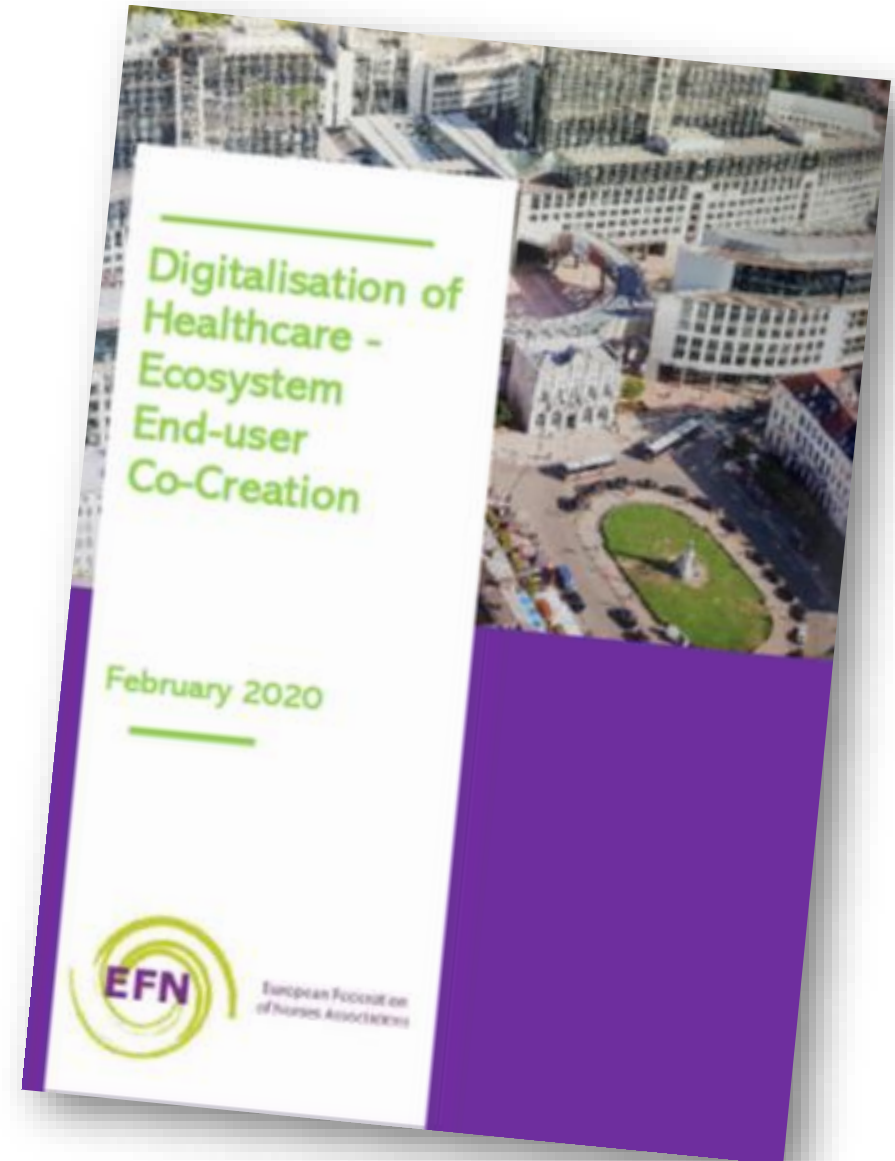
End-user co-designing EU digital health systems

Approved by the EFN Members in October 2019, this Policy Statement presents nurses' request, as end-users, in co-designing the Digital Health Systems in the EU. Positioning nurses and nursing central to digital health policy design and ensuring that nurses can use and develop their eSkills, to their full capacity, can lead to improved citizens and patients' health and well-being, enabling the achievement of Universal Health Coverage.

Read it here :

http://www.efn.eu/wp-content/uploads/EFN-Policy-Statement-on-end-user-co-designing-EU-digital-health-systems-22-10-2019.pdf

EFN Policy Statement on
End-user Co-designing EU Digital Health Systems

Nurses, as end-users, play a central role in co-designing the Digital Health Systems in the EU. Positioning nurses and nursing central to digital health policy design and ensuring that nurses can use and develop their eSkills, to their full capacity, can lead to improved citizens and patients' health and well-being, enabling the achievement of Universal Health Coverage. Health technologies and digital solutions, combined with organisational change in healthcare systems and new skills, will only be effectively and efficiently deployed with the end-user as co-designer.

Therefore, within the context of the digitalisation of the EU health systems, nurses:

- Require fast and full access to Electronic Health Records (EHR) in order to be able to diagnosis, plan and care for patient in an effective and efficient way;
- Pro-actively engage in the co-design process formulating end-user requirements that guide digital development and innovation, ensuring fit-for-purpose solutions;
- Advocate for digitalisation practices and processes to mainly focus on patient safety and empowerment, improving the quality of cross-border care and interoperability through a common terminology;
- Boost continuity of care throughout the patient's journey by using fit-for-purpose digital tools; and,
- Deploy digital tools and systems that reduce the workload of nurses and safeguard the quality of care.

It is socially and economically unsustainable to maintain the traditional vision of healthcare delivery, focused on diseases and curative approaches. Moving towards preventive care will make digital health deliver at its fullest potential, with nurses co-designing tools and programmes, facilitate access and successful deployment in the many environments in which nurses are located, including home care and nursing homes, hospitals and primary care settings. Therefore, nurses as end-users must be able to influence the development of technology reflecting both usability and user-friendliness, to deliver "fit for practice" innovative solutions to empower patients, make health systems sustainable and more accessible.

References

- Council of the European Union (2010) Council conclusions on investing in Europe's health workforce of tomorrow: Scope for innovation and collaboration.
- European Federation of Nurses Associations (2012). EFN Position Statement on Skill Needs, Skill Mix and Task Shifting in Nursing

Please contact Dr Paul De Raeve, Secretary General of the European Federation of Nurses Associations, for more information. Email: efn@efn.be - Tel: +32 2 512 74 19 - Web: www.efnweb.eu

EFN Policy Statement on End-user Co-designing EU Digital Health Systems - October 2019