Health First Europe & My City-Lab Workshop

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Profiling the Health Worker of the Future

Digital skills, innovation & collaboration to meet new model of care

Tuesday, 18 June 2019 (9:30am - 11:00am)
Espoo - Dipoli, Aalto University (Room "Metso")
Profiling the health worker of the future: digital skills, innovation and collaboration to meet the new demands of care

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Profiling the health worker of the future: digital skills, innovation and collaboration to meet the new demands of care

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What is a CityLab?

- Satellite lab centre located in Brussels (opening in Nov 2019)

What are the capacities of a CityLab?

- Point of care testing
- Blood collection
- Education and health literacy
- Formal link between POC and a reference laboratory for specialty testing
Melina Raso, Executive Director of Health First Europe

Objectives:
- Reduce the pressure on one of the biggest Belgium hospital - labs

How:
- Design and release a primary and integrated point of care
- Contribute to the prevention of admission to hospital wards
- Leverage more activity and increase the market position of the lab
- Boost the uptake of innovative and rapid diagnostic tests
Federico Lega, EHMA President

Introduction
Loukianos Gatzoulis
DG Health and Food Safety, European Commission
Shaping the health workforce for effective, accessible and resilient health systems

Dr Loukianos Gatzoulis
Unit "Performance of national health systems"
Directorate-General for Health and Food Safety
European Commission
Policy context

State of Health in the EU
Companion Report 2017

europa.eu/health/state

1. Health Promotion & Disease Prevention
2. Strong Primary Care
3. Integration of care
4. Health workforce
5. Patient at the centre
Communication on enabling the digital transformation of health and care in the Digital Single Market

Three pillars for action:

1. CITIZENS' SECURE ACCESS TO AND SHARING OF HEALTH DATA

2. BETTER DATA TO PROMOTE RESEARCH, DISEASE PREVENTION AND PERSONALISED HEALTH AND CARE

3. DIGITAL TOOLS FOR CITIZEN EMPOWERMENT AND FOR PERSON-CENTRED CARE
Health Workforce Challenges

EXTERNAL
- Population AGEING
- Changing care demands
- MIGRATION patterns
- Technological INNOVATION

HEALTH WORKFORCE

INTERNAL
- WORKFORCE ageing
- Recruitment & retention
- Poor geographic DISTRIBUTION
- Skills mismatches
Changing care demands

• Ageing, multi-morbidities, complex needs
• New care models
  o Shift activity to primary & community care
  o Care at or close to home
  o Integration of health and social care

➢ Train more GPs, nurses, geriatricians

**BUT:**
• Shortages of nurses and family doctors (GPs) in many countries
• The workforce ages, many will retire in the next 5-15 years
Changing care demands

• Work in multi-disciplinary teams, shifting from “silo-specialisation”
• Sharing expertise and patient data
• Collaboration – patient assessment, decision making and preparing care plans
• Listening to and coaching patients (communication, empathy)
• Joint training with social care workforce

• New roles and task shifting
  o “Case managers” / “Care co-ordinators” / “Physician associates”
  o Advanced nursing roles (chronic patient management, prescribing)
  o Advanced pharmacist roles (medicine management)
  o Changing roles for specialists and GPs (focus on diagnosis, clinical decision, coaching)
Prevention & citizen empowerment

• Knowledge and tools for health promotion, risk factors, screening
• Coaching skills to help citizens adopt healthy lifestyles and self-care
• New roles, e.g. “community navigators”
• Early diagnosis and prediction
  – Skills for new tools and tests (genomic tests)
  – Understand/interpret risk scores and follow-up results
  – Counselling and supporting “patients” and their relatives
New technologies

• Digital tools, AI, Big Data, Genomics to disrupt clinical practice and service delivery

• Require technical know-how in addition to clinical knowledge

• Competences in:
  o Using tools for remote patient monitoring, mHealth apps
  o Data management, analysis and interpretation - for clinical decisions
  o Ethics and governance issues for using patient data
  o Using AI algorithms for diagnosis
  o Interpretation of genetic assessments
  o Assessment and purchasing of genomics and digital technologies

• New roles
  o Clinical data scientists, digital medicine specialists etc.*

* The Topol Review “Preparing the healthcare workforce to deliver the digital future”
In conclusion

• New tests, treatments, technologies, care models require:
  ➢ New roles, new skills and new skill-mix in health workforce

• Non-medical staff too

• Update curricula, BUT NOT ONLY:
  o Recent graduates entering workforce are a small % per year

• Continuous professional development for existing health workers

• Attractive career pathways and enriching roles
- **DG SANTE Public Health**: [http://ec.europa.eu/health](http://ec.europa.eu/health)

**Disclaimer**: The views expressed in this presentation are those of the author and do not represent the view of the European Commission on the subject matter.
Anu Söderström
Council of Occupational Therapists for the European Countries – COTEC
Profiling the health worker of the future
Occupational Therapy perspective

Anu Söderström, VP Admin
COTEC, the Council of Occupational Therapists for the European Countries
General Digital skills of all health care professionals
Occupational Therapists’ specific digital skills
• Adaptive technology
• Smart home solutions
• Individual adaptations to devices and aids
• Service user’s skills, competences and needs are assessed
  – home, work/school and leisure time
• Carers’ and family members’ needs and skills
Accessibility
Using digital solutions can also be a meaningful activity in one’s life

-> Participation, enablement, social inclusion

-> Quality of life
Thank you for your time

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Photos: Aivoliitto, AOTA, COTEC, Invalidiliitto, Luontoliitto, Papunet, Reddit, Terapiapsi, VR, YLE, home archive
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European Federation of Employees in Public Services - EUROFEDOP
Tanja Valentin
MedTech Europe
Profiling the Healthcare Worker of the Future –

*Digital skills, innovation and collaboration to meet new model of care*

Tanja Valentin, Director External Affairs
The future of healthcare looks like this …
Other large societal trends influence …

1. **Millennials** (GenY) make up the bulk of the workforce

2. Fully **connected / transparent society**
Cooperation and partnerships central

Seismic shifts

1) Cooperation and partnership is the only way forward

2) Flexibility and openness of looking at roles/responsibilities in new ways is needed

3) This could create significant value for all

- Everyone in healthcare will have to adapt to these changes
- It is impossible for any party to succeed on their own
Further thoughts
3 Enablers of needed healthcare transformation

1. Health and care radically re-centres around the patient

2. The wave of digitalisation brings a new way of delivering healthcare

3. Systems change to maximise value creation in the broadest sense
Healthcare is changing: 5 trends

1. Healthcare in a digital age
2. Demand pressure
3. Workforce pressure
4. People become more consumers of healthcare
5. Increased transparency of outcomes and patient experiences
The wave of digitalisation brings a new way of delivering healthcare

**Today’s care**
- Focus on acute episodes
- Process driven/ mass care
- Fragmented care
- Hospital centric care

**Tomorrow’s care**
- Preventive
- Personalized
- Integrated
- Remote
Systems change to maximise value creation in the broadest sense.
THANK YOU!

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Marta Simoes
European Pharmaceutical Students’ Associations - EPSA
Marta Simões | EPSA Vice President of European Affairs

www.epsa-online.org | @EPSA_Online
Member Associations

EPSA Members

Over 100,000 European pharmaceutical students

45 Member Associations
37 countries
Assessment of pharmaceutical students digital skills & knowledge

Survey that gathered the opinion of 587 students and recent graduates across Europe

- Less than 15% is aware of what eHealth means/is.
- 63% evaluated their digital skills as average or under average.
- 75% claim to have no or almost no education on eHealth.
- 50% do not even briefly become aware of the topic during their studies. Partly eHealth-related classes in some universities are Estonia, France, Norway, Poland, Slovenia, Spain, Sweden, and UK.
- 90% believe that eHealth & digitalisation of healthcare shall change the pharmaceutical curricula and profession for the better.
- 50% would recommend the use of health apps, however, with caution.
- More than 50% use health apps as well as wearable devices (e.g. smartwatches) in their personal lives.
How to make the change happen?

➢ Take classes related to:
  - eHealth
  - new services in the context of digitalisation in healthcare (mobile applications & wearables)

➢ Obtain a broad overview of eHealth and digital skills: possibilities of courses
  - On the current regulatory context of eHealth and information systems used in healthcare,
  - On the security of information, personal data and privacy concerns.

➢ Obtain advanced digital knowledge:
  - Basic programming
  - Robotic technology

How?

➢ **Courses** that would integrate theory with practice
  - delivered jointly by a pharmacist & a healthcare informatics expert.
  - with other healthcare professionals, simulating the real-life professional experience.

➢ **Internships** that would provide them with valuable insight on these subjects.
THANK YOU

BRINGING PHARMACY KNOWLEDGE AND STUDENTS TOGETHER

EUROPEAN PHARMACEUTICAL STUDENTS' ASSOCIATION

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Outi Ahonen
Laurea University of Applied Science
Needed Competencies to Digital Health and Social Care Services

Outi Ahonen Senior Lecturer of Laurea University of Applied Sciences
Project Manager of National Project SotePeda 24/7 Multidisciplinary Competences for Health and Social Care Services in Finland
eHealth strategy of the Finnish Nurses Association 2015–2020

https://www.nurses.fi/nursing_and_nurse_education_in_f/ehealth-strategy-of-the-finnish-
Vision
Nurses are bold in reforming practices and have the skills to use and develop eHealth services on a multi-professional basis and in cooperation with clients and other stakeholders.

Mission
Nurses develop and use eHealth services in caring, rehabilitation, alleviating the suffering and health promotion of clients, and in increasing the wellbeing of citizens.
"Nurses need to have informatics and media literacy for such things as the safe care of clients and production of services as well as the management of services and resources.”

In this strategy, the term “client” also means “patient”.

(Ulrich Rotenberg)
In each of element there are 3 Objectives and 5 Means.
### 4 Strategy

**eHealth services and competencies**

There are three aspects of expertise: knowledge, skills and competencies. Nurses’ training involves five areas of expertise: learning, ethics, workplace skills, innovations, and internationalisation. The production of eHealth services concerns all these areas.

In specific terms, workplace skills refers to smooth operations in workplace communications and interaction, as well as the ability to utilise information and communications technology and networks in the tasks of one’s own field. Innovation expertise means that nurses are able to develop creative problem solving and work methods in their jobs, the proficiency to work on diverse programmes and know how to carry out research and development projects. Nurses also know how to apply existing knowledge and methods in their field and know how to look for financial and client-oriented solutions.

### Objectives

- Nurses know how to use information and communications technology in nursing effectively and responsibly.
- Nurses have basic skills in using technology as well as data literacy and information/knowledge management skills for functioning in eHealth services. Nurses’ levels of competency based on experience and training.
  - Level 1: New nurses, according to Staggers (2001, 2002), have basic competence and skills in informatics and health literacy, as well as in the use of various types of technology.
  - Level 2: Experienced nurses are proficient in their own area of specialisation and will be highly skilled in informatics. They will use information technology to support their work and in cooperation with nurses specialised in for improving various procedures.
  - Level 3: Nurses specialised in informatics are experts in this field, trained in both nursing and informatics. They are involved in the development of the information systems used by their organisation, drawing on their own specialist knowledge.
  - Level 4: Informatics innovators are information management developers, who research and develop theories and superintend information management practices and research.

### Means

1. All nurses have the resources and will to use currently existing electronic information management equipment, to further the good care of clients, and the health and wellbeing of citizens.

2. Students taking upper secondary qualifications in nursing at all universities of applied sciences acquire competence and skills to use eHealth service procedures in informatics in patient care planning and care, and be equipped to participate in the development of work processes and tools in their work community, and the use of eHealth service tools as intended. (See Appendix 1, Table 1)

3. Nurses have the opportunity to deepen their knowledge of eHealth services in specialised studies, master’s degrees at universities of applied sciences and universities, so that they can operate in specialist duties in informatics, both in clinical work and teaching and research in the field of informatics.

4. Nurses are able to demonstrate their expertise by applying for the title of specialist from the FNA.

5. Nurses actively participate in the multi-profession discussion of eHealth service expertise with the aim of broadening it nationally and internationally. Employed nurses have the opportunity to deepen their expertise in this field.
Main aims of the FNA’s eHealth strategy

1. Health care utilises information coming from citizens themselves as part of their health care record. Citizens will be conversant with health information. Health care will meet the needs of citizens in providing targeted treatment and personalized services.

2. Citizens’ involvement in health care will grow and communications will take place partly through social media. The scope for using eHealth services will not be limited according to the weaker user.

3. eHealth services will promote equality and client oriented care, prevent social exclusion and increase client participation. Citizens will look after their own health and self-management and the management of their own information as far as they are able.

4. The work of nurses in eHealth services will be based on legislation regulating the profession and ethical guidelines for nursing, which emphasise the protection of client privacy.

5. Nurses’ training will teach skills in the use of technology, information literacy, knowledge management and the informatics process. These skills will also be updated with supplementary training.

6. Organisations will devote activities to the development of safe electronic services. Managers will ensure that eHealth services will promote client oriented approaches and nurses’ occupational wellbeing. The organisation will enable nurses to have sufficient resources to maintain their competence in the use of eHealth services.

7. With the help of international multidisciplinary research, the functionality, quality, effectiveness and safety of eHealth service strategies will be developed. Information generated through the interaction between clients and professionals will be used in clinical decision-making, informatics and R&D.

8. Every nurse will have the same possibilities to access R&D information and the competence to utilise it. Best practices in nursing will spread rapidly nationally and internationally.

9. Nurses will take a positive approach to the change brought about by eHealth services and the opportunities it will generate. They will use technological solutions as a feature of safe care.

10. Nurses will be included in eHealth innovations and in developing solutions for social and health care reform. Cooperation between the home and place of treatment will change, as diagnoses using computers and smartphones will be done in client’s homes. Contacts, guidance and supervision via networks will change, becoming active between home and hospital. Information will be transparent and patients/clients will own the information collected and share it at their discretion.
Multidisciplinary Competences for Health and Social Care Services in Finland - SotePeda 24/7

• Project is Funded by Finnish Ministry of Education and Culture
• Running 2018-2020
• Coordinator: Laurea University of Applied Sciences
• 24 partner universities
Successful multidisciplinary development of digital health and social care service requires changes and cooperation in education.
Mission of SotePeda 24/7 project

From 2020 onwards, an open learning environment will provide multi-disciplinary studies which are based on trialogical learning approach and are produced by using co-creation methods.

The project develops the expertise of educators, students, and working life representatives in developing human centric digital services in health and social care sector, working in eHealth and social care and in digital pedagogy.
Thank you for your attention!

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Lasse Lehtonen
the Expert Panel on Effective Ways of Investing in Health
Expert Panel on Effective Ways of Investing in Health (EXPH)

Opinion on Task shifting and health system design
Expert Panel on Investing in Health


The views in this presentation are those of the independent scientists who are members of the Expert Panel and do not necessarily reflect the opinion of the European Commission nor its services.
Mandate: TERMS OF REFERENCE

• How to identify and characterize “tasks” suitable for a “task shifting” process?
• What are the main enabling conditions and difficulties/risks that have to be taken into account when defining “task-shifting” measures as part of a health system reforms?
• How to measure the impact of “task shifting” in contributing to the effectiveness of the health system using an evaluation framework to inform decision-making?
Factors driving change

• Changing patterns of disease
  – Multimorbidity, frailty, antimicrobial resistance

• Technology
  – Minimally invasive surgery, intravenous anaesthetics, diagnostic kits, artificial intelligence for image processing, telemedicine

• Professional norms
  – Rejection of traditional hierarchies, growing autonomy of non-physician staff (but still very variable in EU)

• Shortage of health workers

• (Cost containment)

• Decentralisation of organisational structures
Summary of the evidence

- There is little evidence for the rigid demarcation that is between different health professionals, such as doctors and nurses, that exists in many countries.
- Groups other than physicians, and especially nurses and pharmacists, can undertake substantially expanded roles compared to what has traditionally been the case.
- However, they must be adequately trained and supported and function in integrated teams with information-sharing.
- There is a need to better understand the optimal combination or “package” of changes and additions that can act synergistically to improve the quality and safety of healthcare as well as patient experience.
- While it is not necessary to evaluate every change, there is a strong argument for doing so where major changes are taking place, as there is scope for unintended consequences.
- This should not, however, be an argument for doing nothing.
Making it happen: The Calderdale Framework

Focus on engagement

1. Awareness raising
2. Service analysis
3. Task analysis
4. Competency identification
5. Supporting systems
6. Training
7. Sustaining

Focus on risk
Focus on potential to change
Focus on best practice
Focus on staff development
Focus on embedding
Focus on governance
8 Recommendations

• Draft opinion: https://ec.europa.eu/health/expert_panel/events_en
Recommendation 1

We recommend that, in all cases of task shifting, the objective being pursued is clearly specified, the rationale for selecting task shifting as a means to achieve that objective is explained, and the evidence on which the decision is based is presented.
Recommendation 2

We recommend that there should be increased investment in research on task shifting, with the goals of increasing the number of studies from settings that are inadequately represented and understanding the contextual factors that determine what works in what circumstances.
Recommendation 3

We recommend that those responsible for training health workers ensure that they:

– convey positive attitudes to interprofessional and team working and that those being trained have opportunities for interprofessional learning experiences

– provide the specific skills necessary for task shifting, in those cases where the evidence indicates that task shifting is likely to be effective.
Recommendation 4

We recommend that those responsible for implementing task shifting engage in dialogue to understand the expectations and fears of those who will be affected by it, including patients and their carers where appropriate.
Recommendation 5

We recommend that those responsible for health services evaluate, and where necessary, intervene to improve the organisational culture of the facilities that are within their remit to ensure that they promote flexible approaches to working.
Recommendation 6

We recommend that legislative and regulatory authorities review the rules that exist in their jurisdiction to assess the extent to which they place unjustifiable barriers in the way of more flexible ways of working, taking account of the growing body of evidence on the potential benefits of task shifting in particular contexts.
Recommendation 7

We recommend that task shifting to patients and their carers should recognise the goals, expectations, and capacities of those adopting new roles, ensuring that they are empowered to engage fully with health workers to design their care packages and with the ongoing monitoring and evaluation of these packages.
Recommendation 8

We recommend that decisions to engage in task shifting should be planned carefully, taking full account of the implications both for the individuals concerned and for the wider health sector.
Open Discussion

Connect via SLIDO.COM and enter the event code #EUnWorkforce4Care to participate to the poll
Conclusion
Thank you!
Kiitos!