eHealth and Pharmacy – Recent Developments in Policy & Practice

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What is PGEU?

Pharmaceutical Group of European Union

Groupement Pharmaceutique de l’Union Européenne
Pharmaceutical Group of European Union

Members: Professional Bodies & Pharmacists’ Associations

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czech Rep
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Sweden
United Kingdom
Bosnia Herzegovina
FYR Macedonia
Norway
Serbia
Switzerland
Turkey

2017: 32 Countries
PGEU’s Area of Work

- Professional Recognition Directive
- Falsified Medicines Directive
- Medical Devices Regulation
- HTA
- Health Claims on Botanicals
- VAT
- EMVS
- Waste Directive
- Veterinary medicines
- Trade agreements
- European semester!

- Recently closed dossier
- Ongoing...
- To watch in 2016 & 2017
- New dossier
PGEU’s Area of Work

EC Expert & Stakeholder Groups...
eHealth, PS, HWF, Self care etc..
A note on terminology

teleHealth

eHealth

mHealth

ePrescribing

eDispensing

tele/e/m/Whatever....
Presentation Overview

1. Policy Developments
   - EU and Global Policy Developments
   - Overview of EU-funded eHealth Projects
   - EU Project Examples

2. eHealth in the Pharmacy
   - Insights from Research
   - Reality Check
   - PGEU eHealth Policy

3. Examples from Practice
   - Shared-care Records
   - Pharmacy: Entry Point for the Health System
   - Adherence Services
   - ePrescribing and eDispensing
   - The New Paradigm: mHealth

4. Concluding Remarks
1. Policy Developments: (i) EU & Global

EC eHealth Action Plan 2012-2020

Better health and better and safer care for EU citizens

ePrescriptions!
1. Policy Developments: (i) EU & Global

- eHealth in the WHO Euro Region
- Legislation on electronic health records
- Regulation in mHealth
1. Policy Developments: (i) EU & Global

New Health Technologies: Managing Access, Value and Sustainability

OECD New Health Technologies

- Use HTA, coverage and pricing policies to encourage value-for-money
- Harness potential of health data while managing risks appropriately
1. Policy Developments: (ii) Overview of EU-Funded eHealth Projects

- Mental health
- Pain
- Parkinson's and Alzheimer's disease
- Stroke
- Respiratory
- Cardiovascular disorders
- Diabetes
- Cancer
- Paediatrics
- Sight and hearing
- Gastroenterology and incontinence
- Sexual health
- Rehabilitation
- Personal health

- Preventive healthcare
- Mobile health
- Clinical trials and biomedical informatics
- Anesthesia
- Patient safety
- Knowledge sharing & infrastructure for eHealth
- Telemedicine
- Patient empowerment
- eHealth services
- Interoperability & cross-border healthcare
- Clinical research
- Innovation procurement
- International projects in low & middle income countries

+75 recently completed or ongoing projects
1. Policy Developments: (iii) EU Project Examples - JAseHN & WEB-RADR

- **JAseHN**
  - All 28 EU Member States
  - Develop political recommendations and instruments for cooperation priority areas
  - http://jasehn.eu/

- **WEB-RADR**
  - Mobile app: reporting suspected ADRs to EU regulators
  - Feedback following ADR is more relevant
  - https://web-radr.eu/
2. eHealth in the Pharmacy: (i) Insights from Research

The early days of eHealth

What is eHealth?

The death of telemedicine?

Realisation eHealth is a thing

Promising results but still quality issues

Oh et al 2005:

Della Mea 2001:

Eysenbach 2001:

Eysenbach 2001:

Oh et al 2005:

Linn 2011:
2. eHealth in the Pharmacy: (i) Insights from Research

Adherence, ePrescribing & Patient Safety

Linn et al 2012:

Brennan et al 2015:

Rinner et al 2015:

1/3 of European GPs utilise ePrescribing

Patient safety is improved with eHRs

Framework develop a tailored multimedia intervention for adherence

Effects of Shared Electronic Health Record Systems on Drug-Drug Interaction and Duplication Warning Detection

Research Article

Christoph Rinner, Wilfried Grossmann, Simone Kutja Santner, Michael Welzl, and Walter Goll

National health models and the adoption of eHealth and ePrescribing in primary care – new evidence from Europe

Linn et al 2012:

Brennan et al 2015:
2. eHealth in the Pharmacy: (i) Insights from Research

Inter-disciplinary education, data-sharing & greater integration

Role of community pharmacists in chronic disease management

Health information exchange can address fragmentation

Mossialos et al 2015:
From “retailers” to health care providers: Transforming the role of community pharmacists in chronic disease management

Rinner et al 2016:
Improving the international continuity of care in diabetes mellitus treatment with a nationwide Shared EHR system: Estimates from Austrian claims data

Roehrs et al 2017:
Systematic review of personal health records

Roehrs et al.

Systematic Literature Review

Personal Health Records: A Systematic Literature Review

Mossialos et al 2015:
Health Policy

From “retailers” to health care providers: Transforming the role of community pharmacists in chronic disease management

Elia Mossialos1*, Emille Courtein1, Hossein Naci1, Shalom Benrimo2, Marcel Boursy1, Karen Farris1, Peter Noyce1, Ingrid Skentsy1

Rinner et al 2016:
Improving the international continuity of care in diabetes mellitus treatment with a nationwide Shared EHR system: Estimates from Austrian claims data

Christopher Roehrs1, Johann Stolz2, Sarah Loretz3, Constantin Entz4, Georg Heinzer4, Stefan Thurner4, Peter Krenn4, Georg Duthaler1

Roehrs et al 2017:
Systematic Literature Review

Personal Health Records: A Systematic Literature Review

Mossialos et al 2015: Health Policy

From “retailers” to health care providers: Transforming the role of community pharmacists in chronic disease management

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Question......

Is tele/e/m/online Banking the same as tele/e/mHealth?

“Responsibility for medicines and pharmaceutical products will stay with the Directorate-General for Health because I agree with you that medicines are not goods like any other.“

- Jean-Claude Junker, President of the European Commission, 2014-2019

2. eHealth in the Pharmacy: (ii) PGEU eHealth Policy

PGEU 2016 eHealth Statement Annex: 25 practices from 14 European countries (not exhaustive)

2. eHealth in the Pharmacy: (ii) PGEU eHealth Policy

Engage with pharmacists

eHealth should be integrated into health systems

eHRs should be linked with ePrescribing systems

Meaningfully involve end users

Pharmacy should be recognised, supported and reimbursed for improved health outcomes and reduced healthcare costs.

3. Examples from Practice
3. Examples from Practice: (i) Shared-care Records

- Prescription or OTC
- Interactions, abuse, duplication, adherence
- Integrated to existing pharmacy software
- 75% of Belgian pharmacists
- 60% of the Belgian population

Dossier Pharmaceutique Partargé: Belgium

Shared medication record

3. Examples from Practice: (i) Shared-care Records

Dossier Pharmaceutique: France

- Shared medication record
- Legal framework 2007
- ~100% pharmacists, 50% of population
- 330 million data shares
- +100 ‘alarm bells’ / recalls
- Read / write access
- Soon: hospital physicians
- Two studies: DP helped pharmacists detect interactions and contraindications (often OTCs and common Rxs)

http://www.ordre.pharmacien.fr/Communications/Communiques-de-presse/Evaluation-du-DP-de-sa-mise-en-oeuvreaux-Interventions-Pharmaceutiques

Pharmaceutical Group of European Union
Groupement Pharmaceutique de l’Union Européenne
3. Examples from Practice: (i) Shared-care Records

Summary Care Records (SCRs): UK

Summary of medicines, allergies and ADRs

Authorised only, patient’s consent

First step to read-and-write access to full eHR

Proof of concept report:

92% of cases avoided referral to other HCP

18% of cases avoided risk of prescribing error

92% of pharmacists agree or strongly agree that SCR has improved the service to patients

3. Examples from Practice: (ii) Pharmacy as the entry point for to the health system

**Italian “Platform”**

- Link between primary & secondary care
- Book nurses, physiotherapists, specialist doctors in the pharmacy
- Facilitate future PhCare services & DP

3. Examples from Practice: (ii) Pharmacy as the entry point for to the health system

netCare: Switzerland

Collaboration
Between GPs & community pharmacists

Pharmacy
Point of access to the HC system

Triage
Done in the pharmacy, by the pharmacist

Validated
Decision tree by physicians
Follow-up call for evaluation

Training
Extensive training and CPD provided

https://www.medetel.eu/download/2015/parallel_sessions/presentation/day3/NetCare_telemed_eng_2.pdf
3. Examples from Practice: (ii) Pharmacy as the entry point for to the health system

**netCare: Switzerland**

Treatment options:

- Treatment by the pharmacist
- Video consultation with a physician
- Referral to a physician

[https://www.medetel.eu/download/2015/parallel_sessions/presentation/day3/NetCare_telemed_eng_2.pdf](https://www.medetel.eu/download/2015/parallel_sessions/presentation/day3/NetCare_telemed_eng_2.pdf)
3. Examples from Practice: (ii) Pharmacy as the entry point for the health system

netCare: Switzerland - Outcomes

- 73% of cases dealt by pharmacists,
- 20% by physicians teleconsultation
- 7% referred to acute care

- Improvement of practice, satisfaction & pharmacist’s position
- Increase coverage of healthcare, reduction in health inequalities

https://www.medetel.eu/download/2015/parallel_sessions/presentation/day3/NetCare_telemed_eng_2.pdf
3. Examples from Practice: (iii) Adherence Services

New Medicine Service (NMS): UK

Targeted: LTCs, CVD, Diabetes, Hypertension, Asthma, Anticoag, Anti-platelet

2 weeks:
- in-pharmacy consultation
- OR
- phone consultation

- Contact doctor
- Provide advice and arrange final consult (2 weeks)

Opportunity for pharmacist to provide dietary and healthy lifestyle advice

Proven cost effective
Improves adherence by 10%

http://psnc.org.uk/services-commissioning/advanced-services/nms/
http://www.nottingham.ac.uk/~pazmjb/nms/
3. Examples from Practice: (iii)
Adherence Services

DO-PILL: France

Smart ePill Box Connected to the Pharmacy

- Data updated when dispensed
- Alarm & lights for due dose
- Alarm sounds if patient opens the wrong compartment
- Pharmacist informed when compartment opened
- On Rx: 3 projects  a) Transplant  b) Epilepsy  c) Leukaemia

http://www.pharmagest.com/
3. Examples from Practice: (iv) ePrescribing and eDispensing

ePrescribing: Portugal

Benefits: pharmacists
- Minimise dispensing errors
- Better integration
- Reduced admin burden
- Lower costs
- Integrated with reimbursement

Benefits: patients
- Safety
- Confidentiality
- Mobility and convenience
- Integration
3. Examples from Practice: (iv) ePrescribing and eDispensing

ePrescribing: Portugal

From paper prescription to electronic prescription!

Paper prescription = Electronic prescription
Benefit of digital form, authenticity

Dispense line vs prescription line
For greater comfort and speed of context

Prescription line unsolved warnings
To guide pharmacist in good dispense
3. Examples from Practice: (v) The New Paradigm of mHealth

BOT PLUS 2.0: Spain

- Meds, devices & health
- Dispensing support msgs, pictograms, interactions
- Module for PhCare Services
  - Record dispensing info, minor ailments and Medicines Review with Follow-up Service
- Search: brand, generic, national code, ATC code & MA holder
- Filter for renal / hepatic impairment & pregnancy / lactation
- .pdf download of SmPCs
Various other apps have been created by pharmacists/pharmacies in.....

Austria, Belgium, Bulgaria, Czech Republic, Denmark, Portugal, Sweden and the UK

Functions:
- Locate a pharmacy
- Check stock
- Order an OTC
- Video consultation
- Monitor blood ____
- Vaccine & medication reminders
- And much more.....

3. Examples from Practice: (v) The New Paradigm of mHealth
4. Concluding Remarks

eHealth (teleHealth, eHealth and mHealth) is here to stay, but it does not replace the role of the practitioner, but complements their practice.

Pharmacists are increasingly engaging in eHealth activities and services to benefit their patients, payers, health systems, governments and their own practice.

Policy makers, payers and governments have realised the potential contribution to patient care and financial benefits of eHealth activities and services.

Now is the time to act to ensure pharmacists/pharmacies are included in these developments and national action plans for eHealth.
Hvala lepa!

www.pgeu.eu