



Joint Action Health Workforce  
Planning and Forecasting

# **The roles of the pharmacist in the context of an ageing and mobile population**



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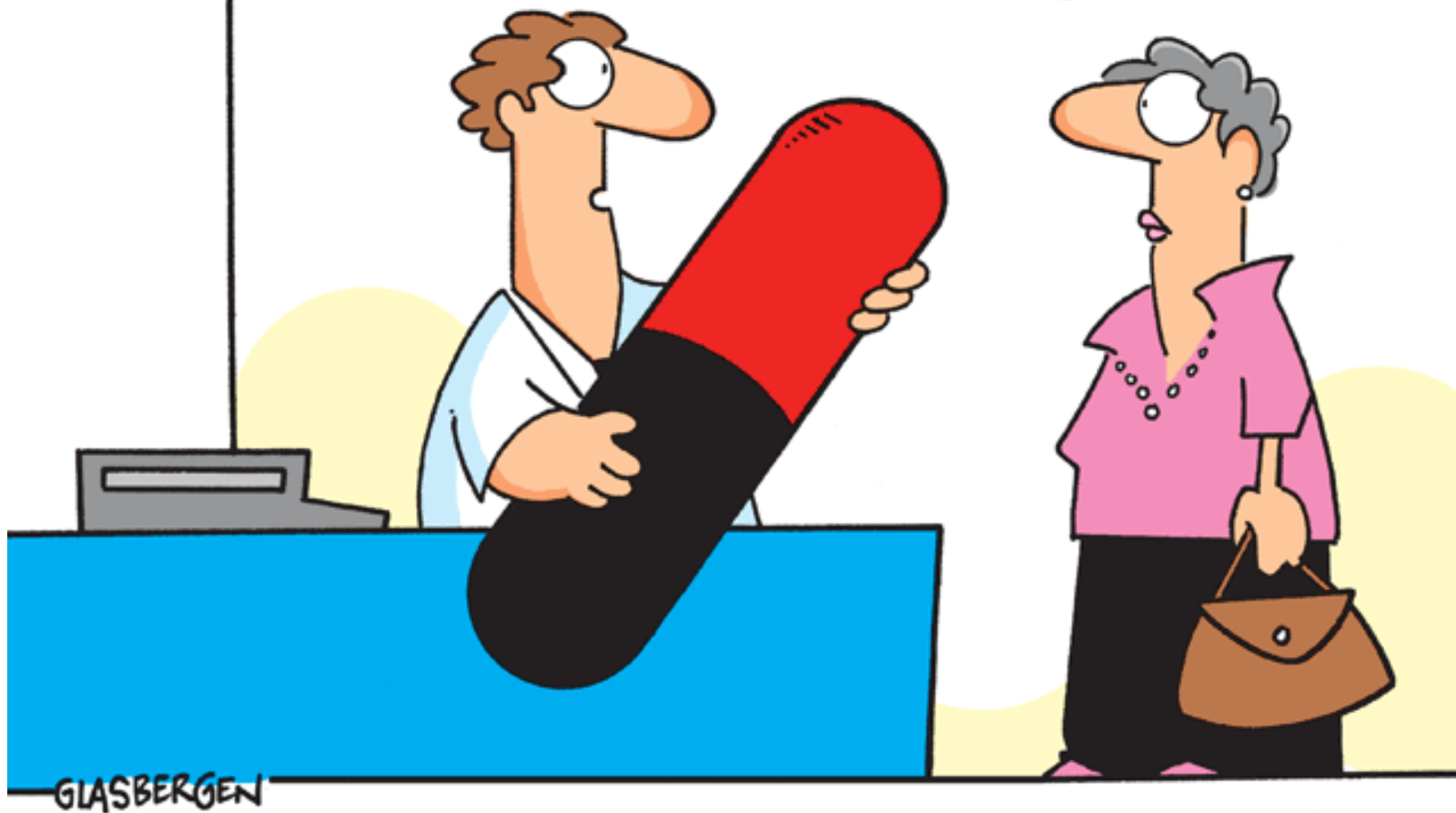
When I have a headache, I take a Tylenol and keep away from children. Just like the bottle says.



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# Pharmacy



**“Each capsule contains your medication,  
plus a treatment for each of its side effects.”**



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# Summary of Presentation

 Self-care in Europe & Beyond

 Pharmacy Services in Europe

 PGEU Medication Review Survey 2015

 Portuguese **new pharmacy contract**

 Irish **'flu vaccination**

 Spanish **conSIGUE** study & **Adhieréte** pilot

 Belgian **Asthma Service**

 Norwegian **Medisinstart service**

 French **New Medicines Service**

 England **Medicines Use Reviews (MURs)** and **New Medicines Service (NMS)**



# Self-care in Europe



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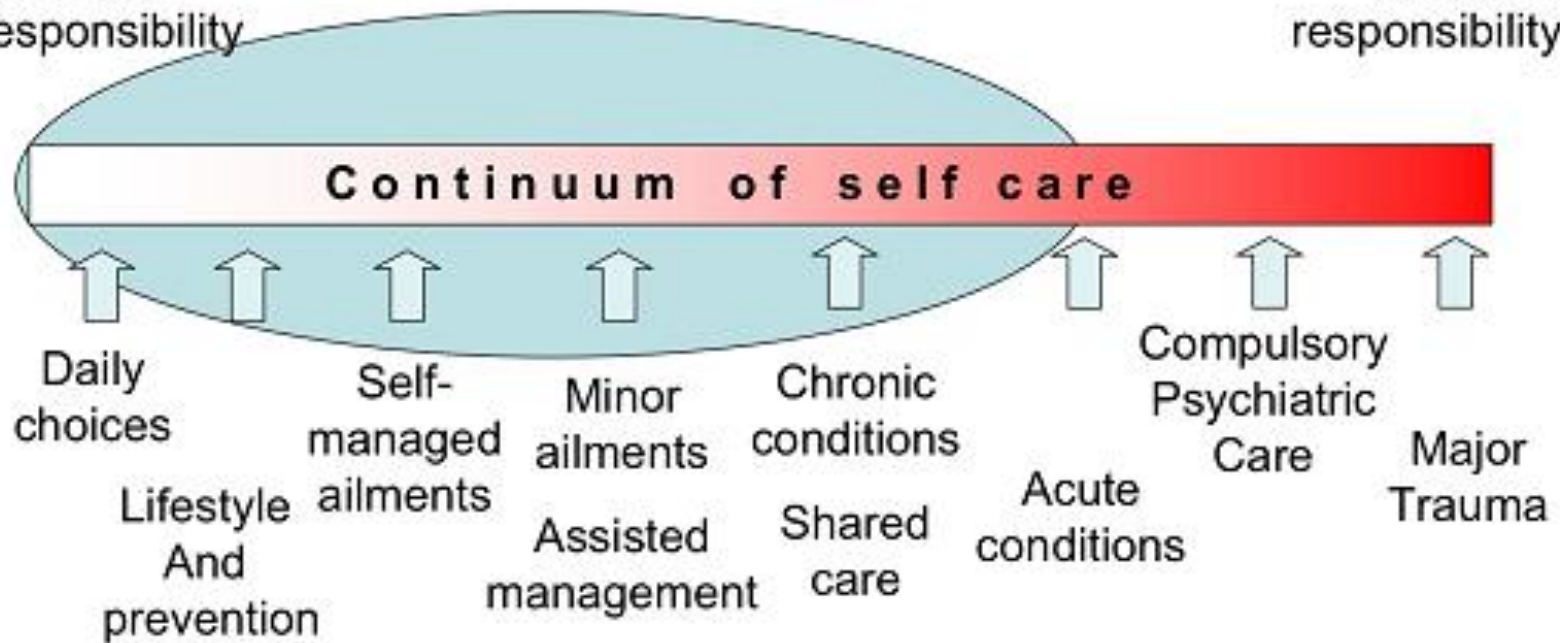
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# The Self-care Continuum

Pure Self Care  
Individual  
responsibility

Pure Medical Care  
'abdicated  
responsibility'



<http://www.cambridgeshireandpeterboroughccg.nhs.uk/faqs.htm>



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The World Health Organization defines self-care as “the ability of individuals, families and communities to promote health, prevent disease, and maintain health and to cope with illness and disability with or without the support of a health-care provider”


World Health Organization (WHO) Regional Office for South-East Asia. Self-care in the Context of Primary Health Care: Report of the Regional Consultation Bangkok, Thailand, 7–9 January 2009. New Delhi: WHO Regional Office for South-East Asia; 2009. [apps.searo.who.int/PDS\\_DOCS/B4301.pdf](http://apps.searo.who.int/PDS_DOCS/B4301.pdf)




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# Self-care in Europe(1) - Minor Ailment Service (Scotland)



The NHS Minor Ailment Service  
at your local pharmacy



Information for patients



The Scottish Government  
Riaghaltas na h-Alba

- Allows eligible individuals to register with and use their community pharmacy as the first port of call for the consultation and treatment of common self-limiting conditions
- The pharmacist advises, treats (**free of charge**) or refers the person, or provides a combination of these actions, according to their needs
- The pharmacist generates a prescription and records any advice, referrals or products supplied

[http://www.communitypharmacy.scot.nhs.uk/core\\_services/mas.html](http://www.communitypharmacy.scot.nhs.uk/core_services/mas.html)



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# Self-care in Europe(1) - Minor Ailment Service (Scotland)



## Key Findings

- Favourable opinions by service users, particularly the convenience and time saved
- Head lice was the most frequent condition followed by pain and cough
- The majority of the consultations were by those exempt from a co-payment by age, particularly the under 16's, followed by the over 60's; patients with income related exemptions accounted for 19% of the consultations
- Community pharmacists managed the consultations satisfactorily and coped well with the additional workload
- General Practitioners were supportive.

[http://www.communitypharmacy.scot.nhs.uk/core\\_services/mas.html](http://www.communitypharmacy.scot.nhs.uk/core_services/mas.html)



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# Self-care in Europe(2)

## Portugal - Pharmacy-only list:

- Approved by the Decree-Law nº 128/2013, 5th September
- Regulated by INFARMED deliberation, January 2015
- Defines the medicines list (13 INNs) & protocols for pharmacy intervention

### *Dispensing Protocols:*

- *Factors to be taken into consideration*
- *Dispensing conditions*
- *Criteria for signpost to physician*
- *Additional information for dispensing*
- *Contraindications*
- *Interactions*
- *References*



# Self-care in Europe(2)

<b>Paracetamol + codeine + buclizine</b> (8 mg + 500 mg + 6.25 mg)	Oral Administration Prophylaxis and symptomatic treatment of migraines, including headache crisis, nausea and vomiting
<b>Cyanocobalamin</b> (1 mg)	Oral Administration Prevention and treatment of vitamin B12 deficiency
<b>Salicylic acid + fluorouracil</b> (100 mg/ml + 5 mg/ml)	External use Common warts, juvenile flat warts , plantar warts, seborrheic warts
<b>Prilocaine + Lidocaine</b> (25 mg/g + 25 mg/g)	External use Topical anesthesia
<b>Amorolfine</b> (50 mg/ml)	Cutaneous use Onychomycosis caused by dermatophytes, yeasts and molds
<b>Ibuprofen</b> 400 mg	Oral Administration Light intensity to moderate pain (rheumatic and muscular pain, back pain, neuralgia, migraine, headache, toothache, menstrual pain) fever and symptoms of cold and flu
<b>Hydrocortisone</b>	External use Dermatitis, inflammatory manifestations and dermatitis rash, sunburn or insect bite
<b>Pancreatin</b>	Oral Administration Treatment of Exocrine Pancreatic Insufficiency (with previous diagnosis)
<b>Macrogol</b> and other associations	Oral Administration Gastrointestinal washes and preparation for complementary diagnostic tests and surgery
<b>Fusidic acid</b> (20 mg/g)	External Use Localized skin infections caused by microorganisms sensitive to fusidic acid



New INNs since January 2015

Ulipristal  
Fluticasone  
Piketoprofen

# Self-care in Europe(3)



## Examples of “P Medicines” from the UK:

- amorolfine lac.,
- azithromycin tabs,
- chloramphenicol ED,
- fluconazole caps,
- naproxen tabs,
- sumatriptan tabs,
- tamsulosin tabs,
- tranexamic acid tabs.....

<http://www.pagb.co.uk/regulatory/pdfs/pomtoplist.pdf>

Further reading:

Aronson J. From prescription-only to over-the-counter medicines ('PoM to P'): time for an intermediate category. *British Medical Bulletin* 2009; 90: 63–69  
DOI:10.1093/bmb/ldp015

Rutter P. Role of community pharmacists in patients' self-care and self-medication. *Integrated Pharmacy Research and Practice* 2015:4



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# Self-care in Europe(4)

## Examples of Patient Group Directions (PGDs) from the UK:

- PDE- inhibitors,
- malaria prophylaxis,
- varenicline,
- finasteride (alopecia androgenetica),
- influenza vaccinations (inj./NS), Hep B/Men B/ACWY vacs,
- brimonidine gel (rosacea),
- eflornithine crm (female facial hair),
- rifaximin (travellers diarrhoea),
- norethisterone (delay of menstruation) & OCP
- emergency hormonal contraception



<https://www.gov.uk/government/publications/patient-group-directions-pgds>

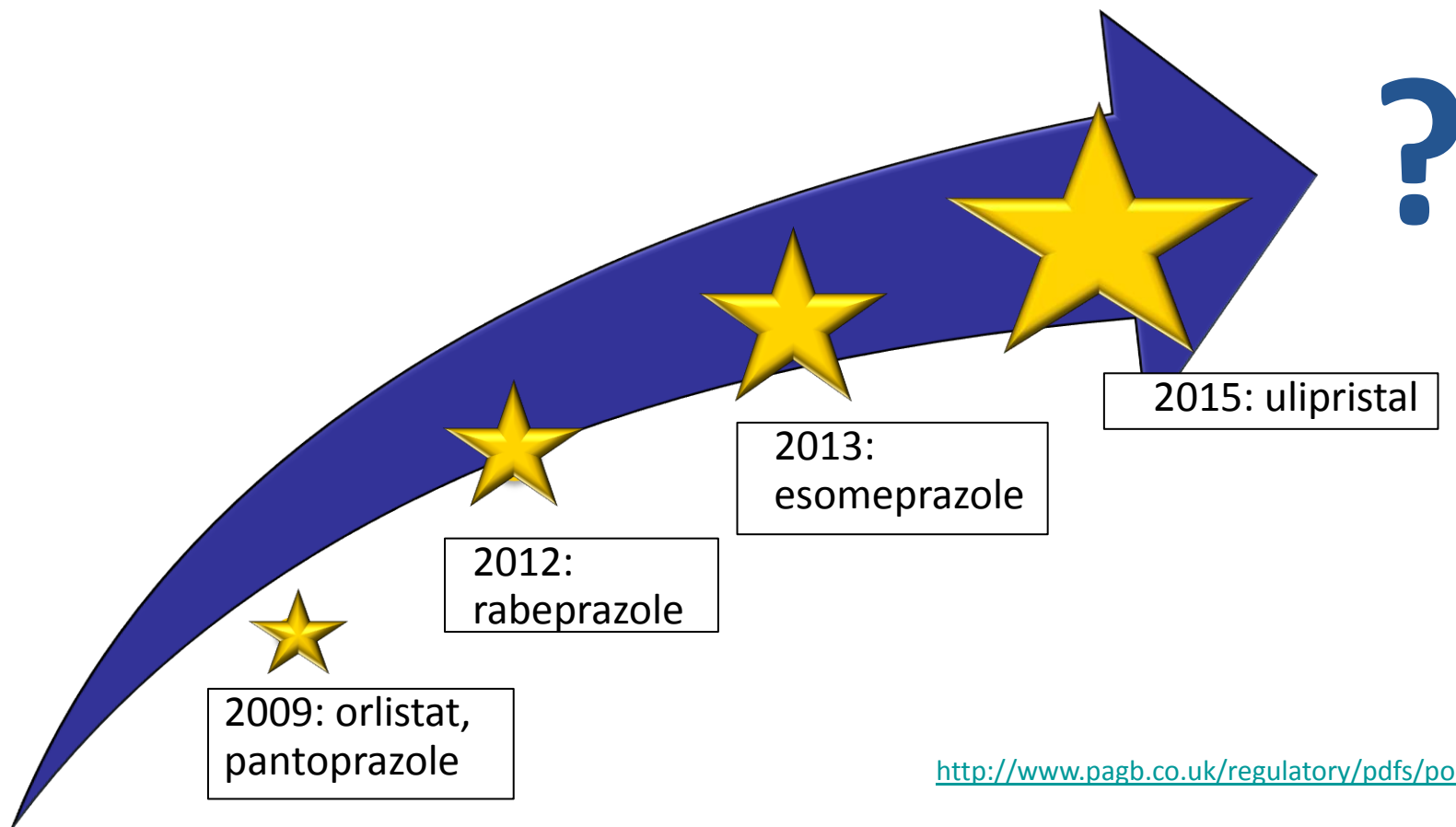


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# Self-care in Europe(5) – Centrally Authorised Medicines



<http://www.pagb.co.uk/regulatory/pdfs/pomtoplist.pdf>



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# Pharmacy Services in Europe



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# Compliance, adherence and concordance

**“Compliance”** comes from the Latin word “complire”, i.e. to fill up / complete an action and to fulfil a promise. Acting in accordance with advice given by the healthcare professional.

**“Concordance”** implies that the healthcare professional and patient should come to an agreement between each other on the regimen that the patient will take.

**“Adherence”** comes from the Latin word “adhaerere”, i.e. to cling to, keep close, or remain constant. Patients need to maintain sticking to a therapeutic regimen in order for the treatment to be successful, with the help of the healthcare professional.

Adapted from: Aronson JK. 2007. Compliance, concordance, adherence. *Br J Clin Pharmacol*. 63(4):383–384. doi:10.1111/j.1365-2125.2007.02893.x



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# Non-adherence

“It is estimated to cause 200,000 premature deaths every year in Europe at a cost to healthcare systems of 125 billion euros<sup>1</sup>”

<sup>1</sup>Medi-Voice project

“The WHO estimates that 50% of chronically ill patients do not properly adhere to their prescribed treatments<sup>2</sup>”

<sup>2</sup>WHO, 2003 - Adherence to Long-Term Therapies. Evidence for action.



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# Results of PGEU Medication Review Survey 2015

*PGEU FS 15.09.23 FS006 Medication Reviews*

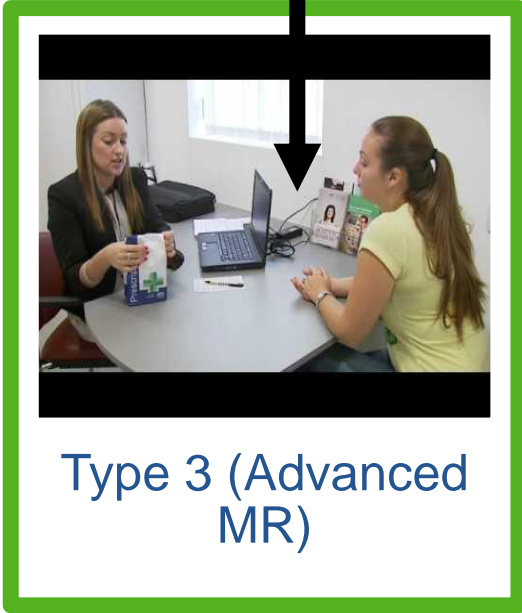


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# What does “Medication Review” mean?

Access to shared patient records

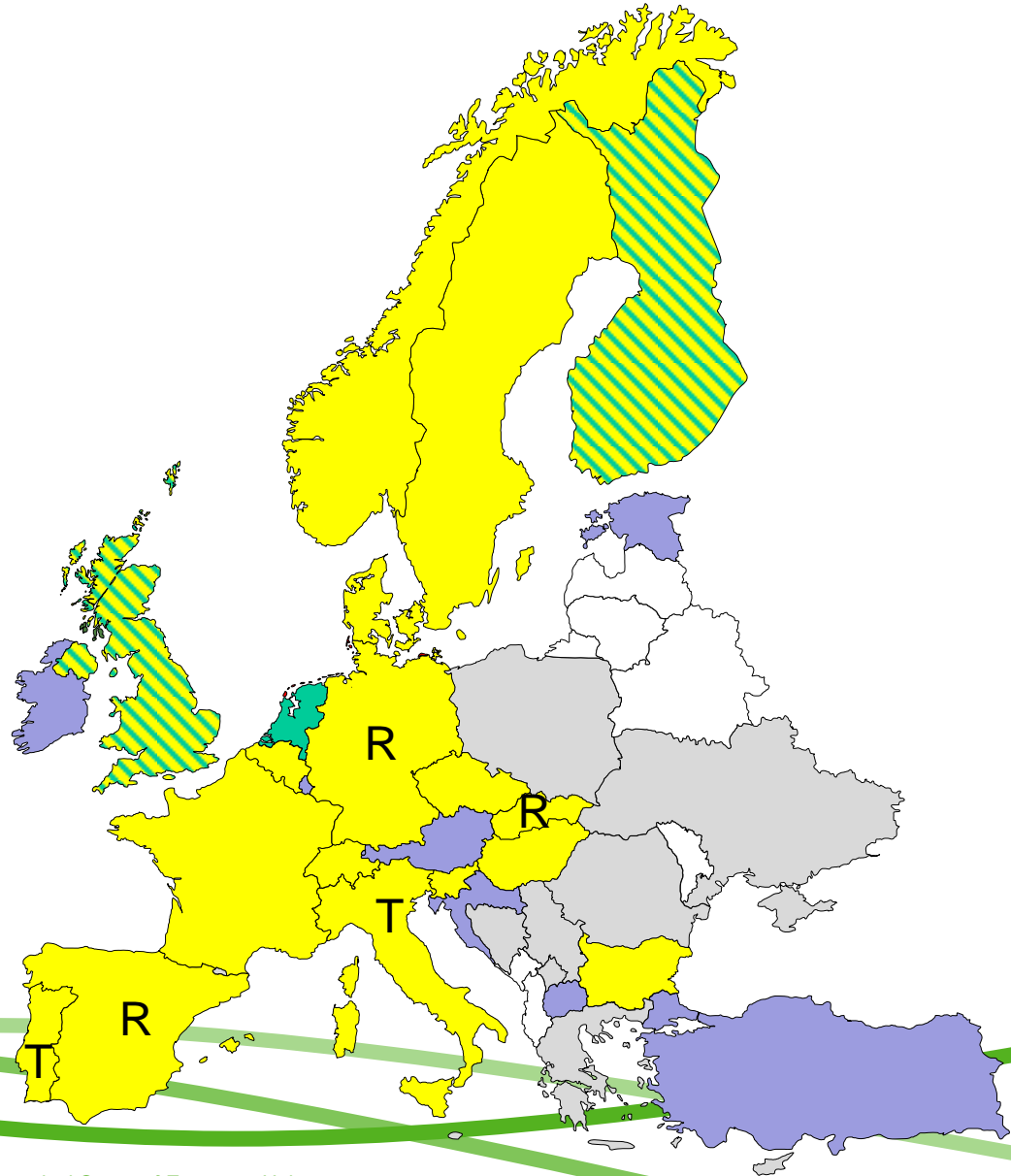


Pharmacists do this already

[http://www.pcne.org/upload/files/43\\_Proposal\\_MedRev\\_statement\\_V2.pdf](http://www.pcne.org/upload/files/43_Proposal_MedRev_statement_V2.pdf)

# Medication Reviews in Europe

- Type 3
- Type 2
- Type 1 (by default)
- T Trial or Pilot
- R Local or Regional
- No Response
- No PGEU Member





# Country Specific Examples



### Essential Services

- Dispensing prescriptions
- Repeat dispensing
- Waste medicines disposal
- Night / on call services
- Diet & healthy lifestyle advice
- Signposting & referral

### Advanced Services

- Medication reviews
- New medicines services
- Therapeutic patient education
- Needle exchange service
- Vaccinations
- Prescribing

### Various Services

- Emergency contraception
- Smoking cessation
- Pregnancy testing
- Homecare services

### Chronic Disease Management

- Diabetes management
- Asthma management
- Hypertension management

### Measurement Services

- Blood pressure measurement
- Cholesterol measurement
- Glucose measurement
- Weight measurement



# Portugal

- **New Pharmacy Contract**: New contract negotiated by Portuguese community pharmacists
  - Diabetes self-monitoring
  - Adherence monitoring programmes
  - Administration of seasonal flu vaccine
  - Needle exchange programme
  - Administration of opioid substitution therapy
  - Growth of the generics market
  - Other areas of intervention to be considered, eg. rapid test for detection of HIV



# Portugal

## Needle exchange programme(1):

- Implemented on 1st January 2015
- National coverage reached by March
- 56% of the Portuguese pharmacies involved in the programme
- 22,983 kits dispensed in pharmacies which corresponds to 45,966 syringes
- After 1 year, evaluation of the programme by an independent entity (Faculty of Economics of University of Oporto)



# Ireland

- **Vaccinations:** Pharmacists contribute to a significant advancement towards the EU target of vaccinating 75% of the older age groups against influenza<sup>1</sup>
- In 2014/15 season over **50,000 patients (1 in 10) vaccinated** by community pharmacists
- Influenza vaccines since 2011, **pneumococcal and shingles added in 2015**<sup>2</sup>



<sup>1</sup><http://file.ipu.ie/publications-40196/ipu-review-25861.html>

<sup>2</sup><http://leovaradkar.ie/2015/10/varadkar-signs-new-law-allowing-trained-members-of-the-public-to-administer-life-saving-rescue-medicines/>



# Spain

- **ADHIÉRETE**: Five patients per pharmacy, two used Personalized Dosage Systems (PDS), two used a mobile application (NNTT) and one used PDS along with an alert system associated with the PDS (PDS+App).
- After pharmacists' intervention, patient **adherence improved from 35% to 75.7%** (Morisky-Green Test)<sup>1</sup>
- Problems and negative results associated with medication were **reduced by 33.4 %**<sup>1</sup>
- **Patient satisfaction** with the Professional Pharmaceutical Service: **8 out of 10**<sup>1</sup>



<sup>1</sup>[http://www.portalfarma.com/Profesionales/InvestigacionFarmacia/Adhierete/Documents/ADHIERETE\\_Report\\_results\\_en.pdf](http://www.portalfarma.com/Profesionales/InvestigacionFarmacia/Adhierete/Documents/ADHIERETE_Report_results_en.pdf)



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# Belgium

- **ENM/BNM:** New medicines service (two follow-up consultations) for inhaled corticosteroid using asthma patients
- After 23 months **36.000 patients have benefited** from the service<sup>1</sup>
- Plans to widen scope to other chronic conditions
- By September 2015, **data available on 1 in 3 Belgian citizens**



<sup>1</sup><http://www.apb.be>



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# Norway

- **Medisinstart Service** New medicines service (two follow-up consultations) for anticoagulants, statins, ACE inhibitors / ATII antagonists, calcium channel blockers and betablockers
- Patients experienced **fewer medication-related problems** after the 2nd consultation
  - Fewer experienced side-effects
  - Less worried about the treatment
  - The pharmacy met their information needs
  - Fewer had negative attitudes to the medication
  - Less unsure that the medication was working
  - Less problems with the medication
  - Patients are most afraid of side effects
- Patients would like this to be a **general service**

Nytteeffekter av

**Medisin ▶ start**

- en åpen randomisert kontrollert studie av  
en nyutviklet apotekteneste



<https://clinicaltrials.gov/ct2/show/NCT02261402>



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# France

- **New Medicines Service:** Two consultations for starting a vitamin K antagonist (VKAs). Nationally commissioned service<sup>1</sup>
- From Jun 2013 to Sept 2015, **235.982 VKA interviews** performed<sup>x+1</sup>
- **14.584 pharmacies** had established a VKA interview by Dec 2014 (63% out of approx. 22.500)<sup>2</sup>
- Patient satisfaction score of **8,7/10**<sup>2</sup>
- Dec 2014: service widened to **asthma medications** – awaiting data
- **Therapeutic Patient Education:** (TPE) – locally commissioned service
- **Dossier Pharmaceutique:** Oct 2015 – 99,7% pharmacies connected



<sup>1</sup><http://www.ordre.pharmacien.fr/Le-pharmacien/Champs-d-activites/L-education-therapeutique>

<sup>2</sup>[http://www.ameli.fr/fileadmin/user\\_upload/documents/CP\\_Bilan\\_1\\_an\\_AVK\\_141217\\_01.pdf](http://www.ameli.fr/fileadmin/user_upload/documents/CP_Bilan_1_an_AVK_141217_01.pdf)



# England

- **Medicines Use Reviews (MURs) & New Medicines Services (NMS)**: Semi-structured interview with patient in consultation room or over telephone
- **Target groups** (high risk medicines, post-discharge, respiratory & cardiovascular patients)
- Proven **cost effective** and to **improve adherence** by 10%<sup>1</sup>
- In 2014/15: 3,172,107 MURs done<sup>2</sup>
- In 2014/15: 774,930 NMSs done<sup>3</sup>
- Seasonal influenza vaccinations (**300.000** in first 30 days of this season), PGDs, prescribing, Summary Care Records.....



<sup>1</sup>The New Medicines Service Evaluation:  
<http://www.nottingham.ac.uk/~pazmi/b/nms/>

<sup>2</sup><http://psnc.org.uk/funding-and-statistics/nhs-statistics/mur-statistics/>

<sup>3</sup><http://psnc.org.uk/funding-and-statistics/nhs-statistics/nms-statistics/>



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# Future Impacts.....(1/2)

- Impact on the skills of future pharmacists
  - Pharmacists will increasingly complete training with the skills, knowledge and competencies required for their expanding clinical, patient-focused roles
  - Pharmacists will provide more health services, complement existing services and reduce the burden on other health services

# Future Impacts.....(2/2)

- Impact on future pharmacists' workload
  - Pharmacists will retain their essential role in dispensing and supply
  - However they will increasingly extend their repertoire of activities and health services to more patient-focused, outcome-based services



**KEEP  
CALM  
AND  
LOVE YOUR  
PHARMACIST**



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# Благодаря!

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