EXPERT WORKSHOP

ASSESSING THE QUALITY OF PATIENT-CENTRED PHARMACEUTICAL CARE IN EUROPE – WHERE DO WE STAND, WHERE SHOULD WE GO?

PROCEEDINGS

Strasbourg (France)
19 November 2009
European Directorate for the Quality of Medicines & HealthCare (EDQM)
7 allée Kastner, CS 30026
F-67081 Strasbourg
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - PROGRAMME</td>
<td>5</td>
</tr>
<tr>
<td>II - KEYNOTE ADDRESS</td>
<td>13</td>
</tr>
<tr>
<td>Dr Keith RIDGE</td>
<td>15</td>
</tr>
<tr>
<td>Pharmaceutical care – a successful approach to ensure best possible patient’s medication outcome</td>
<td>15</td>
</tr>
<tr>
<td>III - INTRODUCTION AND OVERVIEW</td>
<td>17</td>
</tr>
<tr>
<td>Mr Nico KIJLSTRA</td>
<td>19</td>
</tr>
<tr>
<td>Activities dealing with quality and safety standards in pharmaceutical practices and pharmaceutical care</td>
<td>19</td>
</tr>
<tr>
<td>Mr Kees DE JONCHEERE</td>
<td>25</td>
</tr>
<tr>
<td>Different perspectives of the assessment of the quality of pharmaceutical care in Europe</td>
<td>25</td>
</tr>
<tr>
<td>IV - ABSTRACTS AND PRESENTATIONS</td>
<td>31</td>
</tr>
<tr>
<td>Session theme: « What is the added value of assessing the quality of pharmaceutical care in Europe for the patient, stakeholders of the healthcare system, and health policy-makers? »</td>
<td>32</td>
</tr>
<tr>
<td>The role of the patient in pharmaceutical care: patient beliefs and self management</td>
<td>34</td>
</tr>
<tr>
<td>Professor Rob HORNE</td>
<td>34</td>
</tr>
<tr>
<td>Added value of assessing the quality of Pharmaceutical Care in Europe: pharmacists’ perspective</td>
<td>41</td>
</tr>
<tr>
<td>Dr Balázs HANKO</td>
<td>41</td>
</tr>
<tr>
<td>Doctors’ – general practitioners/family physicians’</td>
<td>47</td>
</tr>
<tr>
<td>Dr Isabel CAIXEIRO</td>
<td>47</td>
</tr>
<tr>
<td>Added value of assessing the quality of pharmaceutical care in Europe: nursing professionals’ perspective</td>
<td>51</td>
</tr>
<tr>
<td>Ms Marjukka VALLIMIES-PATOMÄKI</td>
<td>51</td>
</tr>
<tr>
<td>Health authorities’ patients’perspective</td>
<td>54</td>
</tr>
<tr>
<td>Ms Gudrun BUSCH</td>
<td>54</td>
</tr>
<tr>
<td>Added value of assessing the quality of pharmaceutical care in Europe: patients’ perspectives</td>
<td>57</td>
</tr>
<tr>
<td>Ms Joanna GROVES</td>
<td>57</td>
</tr>
</tbody>
</table>
I – PROGRAMME

Background and objectives

Pharmaceutical care is an indispensable element of patient centred healthcare. Patient expectations and desired quality of life are important factors to ensure the best possible medication outcome, and to possibly prevent recurrence of disease.

According to the definition of Helper and Strand (1989), pharmaceutical care is the responsible provision of medicine therapy for the purpose of achieving definite outcomes that improve a patient's quality of life. Pharmaceutical care is based on a relationship between the patient and the healthcare providers who accept responsibility for the patient. This concept implies the active participation of the patient in medicine therapy decisions, and the cooperation of healthcare providers across disciplines, and gives priority to the direct benefit of the patient.

The Committee of Experts on quality and safety standards for pharmaceutical practices and pharmaceutical care (CD-P-PH/PC) contributes to the mission of the EDQM which is to ensure access to good quality healthcare.

Within its programme of activities, the Committee of Experts CD-P-PH/PC studied in 2008/2009, the current awareness and understanding of the concept of pharmaceutical care in Europe, approaches for the quality assessment of pharmaceutical care, the extent to which pharmaceutical care is implemented in practice, and the competences and skills required. This work takes into account the report on the “Creation of a better medication safety culture in Europe: Building up safe medication practices” which was prepared in 2006 by the former Expert Group on Safe Medication Practices (P-SP-PH/SAFE).

This report analysed and presented conclusions of 58 replies from national public health authorities, doctors', pharmacists', nurses', and patients' associations from 17 countries.

- It was found that pharmaceutical care is increasingly being considered an important goal but it has not yet been implemented in practice due to varying degrees of awareness and education among healthcare providers, and inadequate cooperation among healthcare providers.

- The quality of management of medicine therapy, patient's medication outcome, and the safe use of medicines are not measured on a routine basis in most countries in Europe.

- Only a few countries have a legal basis or have regular contacts between healthcare professionals and insurers, for the purpose of implementation of pharmaceutical care.

The Committee of Experts CD-P-PH/PC is therefore organising this expert workshop, with support from experts and scientists in the field to promote awareness on pharmaceutical care, foster support for the development and piloting of assessment tools including indicators, and the implementation and use of assessment results to improve patient's medication outcome. When developing assessment tools including indicators for pharmaceutical care, clearly defined activities, that are acceptable to a wide range of European countries, and other important prerequisites of appropriate medicine therapy, such as patient participation, commitment and medication-related health literacy, have to be targeted.

Healthcare systems should take into account pharmaceutical care as an approach and working method to improve professional standards and provide an essential basis for health policy-making that ensures the best possible outcome of medication in the patient whilst improving the patient’s quality of life.
Aim of the expert workshop

The Committee of Experts CD-P-PH/PC is carrying out a project on model approaches for the development, use and monitoring of pharmaceutical care indicators.

The expert workshop is aimed at:

- creating awareness regarding pharmaceutical care as a successful strategy to improve outcomes of medicines therapy and key approaches used,

- gaining "buy-in" from interested stakeholders regarding the need for the quality assessment of pharmaceutical care and for developing and piloting assessment tools including indicators in line with the above project,

- obtaining feedback and guidance as to the scope and nature of appropriate assessment tools including indicators (methodology for development/adaptation, modes of implementation, use and monitoring of assessment results),

- discussing the added value and feasibility of an EDQM run specific platform to support the above objectives.

At the expert workshop, the Committee of Experts CD-P-PH/PC survey report (2009) ‘Pharmaceutical care: where do we stand – where should we go? Key concepts in pharmaceutical care, quality assessment of pharmaceutical care in Europe, sources of information” will be presented.

Target audience

Participation is upon nomination by member states’ authorities only.

The target audience comprises:

- officials from national public health authorities (policy makers and those involved in the evaluation of medicines’ therapeutic value), national social security systems or services,

- representatives from national and European associations/professionals boards of doctors, pharmacists, nurses, other health professionals, and independent patient associations,

- experts from academic institutions and experts working in the area of pharmaceutical care/development of assessment tools including indicators of health and medication safety, such as medical doctors, pharmacists, nursing scientists,

- International or European organisations or institutions.

A good mix of different professions and of member countries will be important.

The number of workshop participants is limited to 80 in total.
As the expert workshop will be held in English, participants need to be fluent in that language.

Speakers

The speakers, panelists, break-out session moderators, and rapporteurs have relevant expertise and profound working experience dealing with pharmaceutical care/development of health indicators/medication safety. They come from international institutions, the public sector, health professionals’ associations, and from academia (List of speakers, see Appendix).

Working methods

Plenary sessions, panels and moderated break-out sessions.

***
Thursday, 19 November 2009  
Plenary session (PS)
Room: Salle 100

Welcome address and opening
9.00 a.m.  
Ms Susanne KEITEL, Director, EDQM
Mr Jean-Marc SPIESER, Head DBO, EDQM

Keynote address
9.15 a.m.  
Pharmaceutical care – a successful approach to ensure best possible patient's medication outcome
Speaker: Dr Keith RIDGE, Chief Pharmaceutical Officer, Department of Health, United Kingdom, CD-P-PH delegation

Introduction and overview
9.30 a.m.  
Activities dealing with quality and safety standards in pharmaceutical practices and pharmaceutical care carried out by the European Committee on Pharmaceuticals and Pharmaceutical Care (CD-P-PH) and its subordinate Committee of Experts CD-P-PH/PC
Speaker: Mr Nico KIJLSTRA, Dutch Health Care Inspectorate, Committee CD-P-PH Vice-Chairman; Committee of Experts CD-P-PH/PC Chairman

9.50 a.m.  
Different perspectives of the assessment of the quality of pharmaceutical care in Europe
Speaker: Mr Kees DE JONCHEERE, WHO Regional office for Europe, Denmark

10.10-10.40 a.m.  
Coffee break

Session theme: “WHAT IS THE ADDED VALUE OF ASSESSING THE QUALITY OF PHARMACEUTICAL CARE IN EUROPE FOR THE PATIENT, STAKEHOLDERS OF THE HEALTHCARE SYSTEM, AND HEALTH POLICY-MAKERS?”

Chair: Dr Keith RIDGE

10.40 a.m.  
The role of the patient in pharmaceutical care: patient beliefs and self management
Speaker: Professor Rob HORNE, The School of Pharmacy, University of London
11.00 a.m.  Pharmacist’s perspective  
Speaker: Dr Balázs HANKO, EuroPharm Forum

11.20 a.m.  Doctors’ - general practitioners/family physicians’
Speakers: Dr Isabel CAIXEIRO, UEMO - European Union of General Practitioners / Family Physicians ;
Ms Marjukka VALLIMIES-PATOMÄKI, PhD, Ministry of Health, Finland

12.00 noon  Health authorities’ patients’ perspective  
Speakers: Ms Gudrun BUSCH, Federal Office of Public Health (FOPH), Switzerland
Ms Joanna GROVES, International Alliance of Patient Organizations (IAPO)

**12.40 – 1.45 p.m. Lunch**
Room: Salle 100

**Session theme: “ASSESSMENT TOOLS INCLUDING INDICATORS: WHAT HAS BEEN DONE SO FAR?”**

Chair: Mr Nico KIJLSTRA

1.45 a.m.  Approaches to quality measurement in pharmacy, including indicator development  
Speaker: Professor Peter NOYCE, Manchester University, United Kingdom

Panel session (PS) 🌟

Experiences with the implementation of assessment tools including indicators and the use of information for improving health policy-making and improvement of professional standards

2.05 – 2.45 p.m.  Adherence to pharmaceutical care practices, and guidelines  
Speaker: Dr habil. Michael HARTMANN, Universitätsklinikum Jena
Panellists:  
Dr Balázs HANKO, Ms Joanna GROVES, Professor Rob HORNE, nurses (tbc), doctors (tbc), public health authority (tbc)

The panellists will set the scene for the break-out sessions, discussing with the audience experiences with the implementation of tools for the quality assessment of pharmaceutical care including indicators in practice and with using the information for improving patient medication outcomes through improved professional standards and health-policy-making in general.
Break-out sessions (BS)

2.45 – 4.15 p.m.

Multidisciplinary groups of participants selected for the individual break-out sessions according to their expertise and preference will break out in parallel sessions (1-5). All breakout sessions will be attended by moderators and rapporteurs.

The participants will give feedback and indicate their priorities as to the areas and questions discussed in the individual break-out sessions.

At the beginning of each break-out session, the participants will agree on the selection criteria which will be used in the individual break-out session for priority-setting. The participants will be supplied with background reading and working documents before the expert workshop.

**BS 1:**

Room: Salle 100

2.45- 3.30 p.m.

**a. Understanding the pharmaceutical care concept and applying it in practice**

*Moderator:* Dr. Sabine VOGLER Gesundheit Österreich GmbH, Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitswesen/Austrian Health Institute (GÖG/ÖBIG)

*Rapporteur:* Mr Max WELLAN, Austrian Chamber of Pharmacists

3.30 – 4.15 p.m.

**b. Pharmaceutical care: the key role of patient needs, beliefs, values and self-management competences (medication-related health literacy)**

*Moderator:* Professor Han DE GIER

*Apporiteur:* Ms Christiane RITSCHEL, Graduate Nurse, Nursing scientist, University of Applied Sciences Jena, Germany

**BS 2: Health systems : The safe and effective use of medicines: identifying indicators for preventable drug-related morbidity**

Room: Salle 200

*Moderator:* Dr Darren ASHCROFT, School of Pharmacy and Pharmaceutical Sciences, Manchester University, United Kingdom

*Rapporteur:* Professor Peter NOYCE
<table>
<thead>
<tr>
<th>BS 3: Health interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication and interdisciplinary cooperation</strong></td>
</tr>
<tr>
<td><strong>Moderator:</strong> Dr Afonso Miguel CAVACO, Faculty of Pharmacy, University Lisbon, Portugal</td>
</tr>
<tr>
<td><strong>Rapporteur:</strong> Dr Charlotte SALTER, University of East Anglia, United Kingdom</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room:</strong> Salle 400</td>
</tr>
<tr>
<td>2.45 - 3.30 p.m.</td>
</tr>
<tr>
<td><strong>a. Methodologies for indicator development, adaptation, and use</strong></td>
</tr>
<tr>
<td><strong>Moderator:</strong> Dr. Martin HENMAN, School of Pharmacy, Trinity College Dublin, Ireland</td>
</tr>
<tr>
<td><strong>Rapporteur:</strong> Mag. Peter WIENINGER, Federation of Austrian Social Insurance Institutions</td>
</tr>
<tr>
<td>3.30 - 4.15 p.m.</td>
</tr>
<tr>
<td><strong>b. Monitoring and data linkage for safe prescription, drug use and traceability</strong></td>
</tr>
<tr>
<td><strong>Moderator:</strong> Professor Christian LOVIS, MD MPH, University Hospitals of Geneva, Switzerland</td>
</tr>
<tr>
<td><strong>Rapporteur:</strong> Dr Johnny BENEY, Institut Central des Hôpitaux Valaisans, Switzerland</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS 5: Specific needs of regions in Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room:</strong> Salle 600</td>
</tr>
<tr>
<td>4.15 - 4.30 p.m.</td>
</tr>
<tr>
<td><strong>Moderator:</strong> Mr Kees DE JONCHEERE, WHO Regional office for Europe</td>
</tr>
<tr>
<td><strong>Rapporteur:</strong> Dr Zinaida BEZVERHNI, University, Chisinau, Moldova</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coffee break</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foyer</td>
</tr>
</tbody>
</table>
**Plenary session (PS)**

Room: Salle 100

**Session theme:** “CONCLUSIONS - THE WAY FORWARD”

4.30 – 5.15 p.m.

Chair: Mr Nico KIJLSTRA, Dutch Health Care Inspectorate, Committee CD-P-PH Chairman; Committee of Experts CD-P-PH/PC Vice-Chairman

Break-out session moderators: Dr Darren ASHCROFT, Dr Afonso Miguel CAVACO, Professor Han DE GIER, Mr Kees DE JONCHEERE, Dr Martin HENMAN, Professor Christian LOVIS, and Dr Sabine VOGLER

The break-out session moderators will present the conclusions and moderate a discussion with the audience on the conclusions, the next steps for going forward, and in particular the modes of strengthened cooperation in the field of promoting the quality of pharmaceutical care in Europe. The workshop conclusions will be adopted by the audience.

5.15 p.m. Speaker: Jean-Marc SPIESER
Dr Keith RIDGE  
Chief Pharmaceutical Officer, Department of Health, United Kingdom, CD-P-PH delegation

Pharmaceutical care – a successful approach to ensure best possible patient’s medication outcome

Medicines remain the most common therapeutic intervention in modern healthcare. The European Public Health Association estimates that in excess of 100 billion Euro is spent each year on medicines across Europe.

Medicines bring many benefits, but also have potential for harm.

Pharmaceutical care offers a systematic approach to the use of medicines in individual patients, and to improve the quality of care to patients.

However effective pharmaceutical care requires both an understanding of individual patient needs and cooperation across health care professionals, including shared documentation. Full implementation of pharmaceutical care is likely to require educational reform, whilst routine and standardised measurement of outcome of pharmaceutical care would allow comparison across localities and perhaps across systems.
Dr Keith RIDGE

Chief Pharmaceutical Officer, Department of Health, United Kingdom, CD-P-PH delegation

Pharmaceutical care – a successful approach to ensure best possible patient’s medication outcome

Agenda

- Is there an issue with how we all use medicines
- National policy versus individual patient
- The role of pharmaceutical care in quality
- The challenge of full implementation of pharmaceutical care

The role of pharmaceutical care in quality of care

- Pharmaceutical care: the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life:
  - The responsible provision of drug therapy
  - Achieving definite outcomes
  - Improve a patient’s quality of life
- Sufficiently patient-centred?

The challenge of full implementation of pharmaceutical care

- Educational reform
  - Underpinned by science
  - Enhanced clinical, interpersonal and communication skills
- The need for collaboration across and within professions
- Operational and system barriers
- Improving the evidence base in primary care
III – INTRODUCTION AND OVERVIEW
Mr Nico KIJLSTRA  
Dutch Health Care Inspectorate, Committee CD-P-PH Vice-Chairman; Committee of Experts of CD-P-PH/PC

Activities dealing with quality and safety standards in pharmaceutical practices and pharmaceutical care

<table>
<thead>
<tr>
<th>Quality assessment in pharmaceutical care</th>
</tr>
</thead>
<tbody>
<tr>
<td>- History pharmaceutical care within Council of Europe</td>
</tr>
<tr>
<td>- Objectives of the project</td>
</tr>
<tr>
<td>- Some examples of indicators</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee of Ministers CDH</td>
</tr>
<tr>
<td>Steering body CD-P-PH</td>
</tr>
<tr>
<td>+ European Committee on Pharmaceutical Care</td>
</tr>
<tr>
<td>Expert Committee CD-P-PH/PC</td>
</tr>
<tr>
<td>- Expert Committee on quality and safety standards in pharmaceutical care and pharmaceutical practice</td>
</tr>
<tr>
<td>Working groups + experts</td>
</tr>
<tr>
<td>Quality assessment pharmaceutical care</td>
</tr>
<tr>
<td>Pharmacy preparations</td>
</tr>
<tr>
<td>Traditional Chinese Medicines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Council of Europe Expert Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993 Resolution on the role and training of community pharmacists</td>
</tr>
<tr>
<td>- Public sensitive, multidisciplinary pharmaceutical care</td>
</tr>
<tr>
<td>2005 Report Creation of a better medication safety culture in Europe</td>
</tr>
<tr>
<td>- Patient centered approach to increase patient safety</td>
</tr>
<tr>
<td>- Importance of knowledge, skills, attitudes and values in safe and effective use of medicines</td>
</tr>
<tr>
<td>2009 Chiefs within the ECOP and renewed terms of reference</td>
</tr>
<tr>
<td>* To improve public health care and practice, improving pharmaceutical care in community, and within specific groups and within specific groups and specific regions, in general: valuing the social and ethical context of healthcare</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Committee of Experts in Quality and Safety Standards in Pharmaceutical Care and Pharmaceutical Practice (CdE PC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was entrusted to:</td>
</tr>
<tr>
<td>- Carry out studies on the implementation of quality assessment through quality indicators</td>
</tr>
<tr>
<td>- Prepare proposals for harmonized provisions and policies</td>
</tr>
<tr>
<td>- Contribute to practical implementation of the above</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality assessment project</th>
</tr>
</thead>
<tbody>
<tr>
<td>All within the 3 year mandate (renewable) 2008 - 2010</td>
</tr>
<tr>
<td>Deliverables: survey of current situation, potential indicator inventory, report of pilot activities, guidance document</td>
</tr>
<tr>
<td>Phases 1 - 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality assessment project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
</tr>
<tr>
<td>- What definitions of key concepts in pharmaceutical care are currently accepted?</td>
</tr>
<tr>
<td>- Are quality indicators already available and operational?</td>
</tr>
<tr>
<td>- What is the relevance of existing databases for e.g. collection?</td>
</tr>
<tr>
<td>- Who are the relevant stakeholders to be involved?</td>
</tr>
</tbody>
</table>
Quality assessment project

Phase 2
Select relevant quality domains
Set up topic groups preparing a collection of potential indicators or other QA tools
Select a preliminary set of pilot indicators

Phase 3
Select countries and groups of experts for the pilot
Gather data from different European countries on all selected quality domains, using a limited set of indicators
Evaluate outcomes, develop proposals for follow-up, report

Pharmaceutical care

Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life.

These outcomes are:
- Cure of a disease
- Elimination or reduction of symptoms
- Arresting or slowing of disease process
- Preventing symptoms or disease

Quality indicators – NL background

Objective 2006
- Data-based approach to Ein in human, 2005 study
- Develop a basic set of quality indicators to be used for early supervision

Objective 2009
- Evaluate the first version of the basic set of indicators
- Develop an extended set covering public pharmacists, hospital pharmacists and dispensing domains, useful for all relevant stakeholders.

Quality indicators – development

Quality domains of VS indicators after first round of consultation:
- Medication Quality assurance of dispensing process (1)
- Medication shortages (1)
- Prescription Compounding of medication (3)
- Dosage
- Pharmacotherapists (1)
- Concomitant drugs and interactions (7)
- Drug dialogs (n/a)
- Dosage
- Measuring patients in practice (2)
- Patient counseling on importance of patient specific instructions (4)
- Patient counseling on importance of dispensed medications (5)
Quality indicators - implementing

- Ensuring sufficient legal basis
- Written agreement between pharmacists association and inspectorate
- Paperback and electronic publication of indicators list + motivation
- Communication and information campaign
- Selecting data warehouses, making of data entry tool, data cleaning algorithms
- Setting up helpdesk
- Opening of restricted website, reminding letters
- Organizing a team for analysis and reporting

Quality indicators - first results

- There is still some misunderstanding of the indicators concept
- Quality of your definition is critical
- Selection of patient groups in databases is critical
- Slightly different algorithms used for different information systems give different outcomes (2 - 4%)
- Answers are usually slightly over-optimistic, this bias is no problem
- Fantasy results sometimes appear, as does plain fraud

Overall response rate

- NL: 14.7 million inhabitants
- 1559 public pharmacies, 410 dispensing doctors, 56 hospital pharmacies

Respondent Pharmacy Characteristics

- Regular public pharmacy: 96%
- Dedicated night and weekend services
- Dose dispensing pharmacies
- Clinical outpatient pharmacies
- Intermediate scale preparation pharmacies
- Internet pharmacies
- Radiopharmaceutical pharmacies
- Naval pharmacy
- Homeopathic pharmacy
- Traditional Chinese Medicine Pharmacy
  
  All together: 4%

Pharmacy Information systems

Indicator 4: Blood glucose lowering medicines with registered contraindication diabetes

- 286 pharmacies entering numerator/denominator
- 91 pharmacies data collection according to protocol
- N = 1782
- Average = 77 ± 31%
- PS = 28.8
- P95 = 100
Indicator 38: Patients with 1st time inhalation medication receiving inhalation demonstration/instruction

N = 1799
Average = 69.4 ± 32% 71 pharmacists: report demonstrating 91% with additional points.
Needs to do: state their percentage, value 100%

Indicator 39: Strong opioids and use of laxatives

N = 1799
Average = 45 ± 14%
Poss = 25.7
Post = 14.6
Prescriptions: details different opioids
prescribed and upon request

Indicator 35: % patients > 70 years with classical
NSAID’s and ulcer protection

Prevention of gastrointestinal bleedings
Prophylaxis: additional doses or monotherapy in hospital doses
N = 1756
Average = 71%

Collecting risk/quality signals
- Signalling levels
- Generic
- Per indicator
- Non-response
- IF value: denominator less than 8.9% form calculated value
- Blank value
- Signal if percentage is given but values are lacking
- Outcome within (xx / xx or % which)
- Categorical indicators: simple yes/no
- Discussion: weighing factors

What could be gained?

- Quality awareness among professionals and patients (transparency)
- Stimulate the multidisciplinary level playing field for prescribers, providers, and users of medicines
- Enable professionals to professional bodies through their responsibility for quality and safety of pharmaceutical care, to improve their professional services
- Provide policy makers with better data to decide on
- Enable supervisory activities to target on relevant risks

Challenges

- To release behind classical decision-making behavior
- To design coherent tools for prescribers, practitioners, nurses, etc.
- To develop ‘shared indicators’ for multidisciplinary treatment and team efforts
- To agree on priority, management, and assess issues of the data collected
- To avoid bureaucratic burden
- To generate meaningful information for patient

22
Quality Indicators – future?
Investigation of overall validity and usefulness
Determination of efficacy and impact
Constant renewal and improvement
Develop standards

Quality Indicators – future?
Charter on quality measurement in pharmaceutical care
Networking structure / Indicators forum
Indicators library

Concluding
The use of quality indicators is worthwhile but requires substantial investment.
Quality indicators – as a tool – are generally well accepted.
There is a need for international co-operation, sharing knowledge and resources, preventing duplication.
Studies have to be undertaken to determine overall validity and effectiveness of the method.

Quality indicator requirements
Specifíc
Measurable
Comparative
Representative
Discriminating
Robust
To be influenced by pharmacy
Publicly available (in due time)
Useful for supervision
Mr Kees DE JONCHEERE
WHO Regional Office for Europe, Denmark

Different perspectives of the assessment of the quality of pharmaceutical care in Europe

Overview

- Health and health care in Europe: some data
- Considerations on measuring quality and performance
- WHO approach to measuring performance of medicines policies globally
- Challenges and conclusions
Medicines expenditures in Europe
(2001 or latest figures)

Functions and objectives of a health system

Goals for pharmaceutical policies in Europe
- Equitable access for patients to effective, safe and good quality medicines
- Enhancing appropriate use of medicines for better health outcomes
- Ensuring value for money, affordability and sustainability, and financial protection for patients
- Balance with industrial policy objectives
- Underpinning values: equity, solidarity, access, quality, participation

Appropriate use of medicines and dimensions of quality of care
- Patient quality: provides patients with what they want and expect, during/after the service.
- Professional quality: follows procedures and methods thought to be most effective in meeting clinical needs, and meets the patient’s needs assessed by professionals.
- Management quality: uses available resources in the best way to achieve patient and professional quality, without waste and within higher level requirements.
Why monitor and assess?
- To assess capacity (infrastructures and resources)
- To measure outcome of pharmaceutical objectives (access and rational use of quality medicines)
- To review/implementation strategies, so adjustments can be made
- To evaluate progress towards identified objectives
- Compare performance (hospitals, regions, ...)
- Analyse trends over time

Necessary criteria for Monitoring and Evaluation indicators
- Clarity: easily understood and calculated
- Usefulness: reflects an important dimension of performance
- Measurability: can be defined in quantitative or qualitative terms and uses existing collection on information quality and availability
- Reliability: permits consistent assessment over time and among different observers
- Validity: is a true measure of what it is meant to measure

WHO Core indicators to monitor national medicine policy

Level I indicator topics: Pharmaceutical structure & processes
- National Medicines Policy (NMP)
- Regulatory System
- Medicines Supply System
- Medicines Financing
- Production and Trade
- Rational Use of Medicines

Level II indicator topics: Pharmaceutical outcomes
- Access
  - Availability
  - Affordability
  - Geographical accessibility
- Quality
  - Acceptability of storage
  - Medicines perceived
- Rational Use of Medicines
  - Prescribing practices
  - Patient care
  - Facility-specific factors

Challenges for monitoring and assessment of public policies
- It is difficult to establish a sustainable system of regular monitoring
- Resources are not consistently allocated to this task
- There is limited advocacy for a culture of monitoring
- Many efforts to develop monitoring tools have been extensive, but impractical
- Most monitoring tools include indicators that are difficult to collect, especially if done regularly.
Measuring quality improvement = measuring performance

Quality change capacity:

- Ability to design and implement a solution in a way which visibly improves quality
- Depends on the amount of resources, expertise and implementation quality methods (quality units and how these teams work together)
- Health workers understanding of quality: motivation and knowledge of quality methods
- Higher "quality change capacity" will be needed for more complex changes, and coordination with competing returns

Quality and safety cycle

Conclusions

- Performance and quality goals and priorities may differ across countries
- There are different dimensions to quality
- Define core indicators for measuring and expand as the health system develops, and according to what one needs to measure and achieve
- A successful quality strategy requires a multi-faceted approach with involvement of patients, professionals and relevant stakeholders
The role of the patient in pharmaceutical care: patient beliefs and self-management

Behavior as the rate limiting step between effective treatments and health gain

Effective treatments

BEHAVIOUR

PRESKRIBER

PATIENT-adherence

Optimum outcomes

Nonadherence to medicines

WHO REPORTS, NHM RC POINTS:
1. Estimated that between 30-50% of medicines prescribed for long-term conditions are not taken as directed
2. If prescription was appropriate then this represents a loss for patients, the NHS and pharmaceutical industries
3. Effective interventions are elusive (Haynes et al 1996, 2003)

Perceptions & Practicalities Model of Adherence

UNINTENTIONAL nonadherence

Capacity & resources

Practical barriers

INTENTIONAL nonadherence

Motivational Beliefs/Barriers

Perceptual barriers

Proving clear instructions/information does not guarantee adherence

The information-action gap

Information

BELIEFS

Action

To result in action, information must either:

Conform with our existing beliefs OR change them

Information is essential to initiate change BUT more than information is required to guarantee adherence
IV – ABSTRACTS AND PRESENTATIONS
Session theme: « What is the added value of assessing the quality of pharmaceutical care in Europe for the patient, stakeholders of the healthcare system, and health policymakers? »
Session Chair

Dr Keith RIDGE
Chief Pharmaceutical Officer, Department of Health, United Kingdom

Speakers:

Prof Rob HORNE
The School of Pharmacy, University of London

Dr Balázs HANKO
EuroPharm Forum

Dr Isabel CAIXERO
UEMO-European Union of General Practitioners/Family Physicians

Ms Marjukka VALLIMIES-PATOMÄKI
Ministry of Health, Finland

Ms Gudrun BUSCH
Federal Office of Public Health, Switzerland

Ms Joanna GROVES
International Alliance of Patient Organizations (IAPO)
The role of the patient in pharmaceutical care: patient beliefs and self-management

Professor Rob HORNE
The School of Pharmacy, University of London
Information and beliefs: a thought experiment

What are the salient beliefs influencing medication-taking behaviour?

Beliefs about Medicines Questionnaire (BMQ)

SPECIFIC BELIEFS
Views about prescribed medication

Necessity
Beliefs about the personal need for medication to maintain or improve current and future health

Concerns
Beliefs about potential negative effects

Variations of Necessity Beliefs Across Conditions
Variations of Specific Concerns Across Conditions

Specific concerns about medicines for IBD


Studies across a range of illnesses, countries and cultures indicate that the Necessity–Concerns Framework is useful for explaining low adherence.

Low Adherence

Necessity

Concerns

Segmentation: Belief groups and adherence

Segmentation: Belief groups and adherence

Let’s pause to take stock:

-- Scores on the Beliefs about Medicines Questionnaire (BMC) (simple side of 4A) provides a quick and easy assessment of key beliefs influencing whether patients start and continue to take medicines.

-- Many patients are not getting optimal access to and benefit from medicines because of unmet beliefs.

-- In some situations they may be right but in many cases, beliefs appear to be based on misconceptions about the potential benefits and risks and treatment.
Informed Adherence

Healthcare providers have a duty to help patients make treatment decisions that are informed by an accurate understanding of the likely benefits and risks of treatment.

- rather than by erroneous beliefs about their illness and the treatment.

- informing should be an active process.

- it is not just presenting the facts.

- it also considers patient's beliefs and whether beliefs are a barrier to an unbiased interpretation of the evidence.

- can we change people's beliefs about medicines?

First Prescription Service: a pilot study

- Pharmacists follow-up on unprocessed 'long-term' repeat prescriptions at the point of collection from community pharmacy.

- 36% of patients agreed to complete the intervention vs. 22% at usual care.

- 52% more likely to refer patients to pharmacies (Nonsense Concerns)

- 7 higher adherence

- fewer patients reporting medication wasted

Common-sense origins of medication necessity beliefs:

Common-Sense Perceptions of Illness and Treatment – a Question of Fit

Judging personal need for maintenance treatment (MT) without symptoms

Taking MT does not make you feel better (contrast with 'as needed' mode).

Missing doses may not immediately make you feel worse.

potentially reinforcing perception that MT don't matter to me.

- Many patients do not have a clear 'common-sense' rationale for why MT is necessary (e.g. symptoms vs. problem).

- Contrast between short vs. long-term consequences.

Common-sense origins of medication concerns
Suspicion of pharmaceuticals linked to:

- Diminished public trust:
  - Expects
  - Medical technology and science
  - Causes et al. (2005) BMJ, in press
  --world 2005 Report
  - World Health Organization

- Warnings about medicines:
  - Modern medicine (p. 143)
  - Laxative Guidelines Publications

- Widening concerns:
  - Chemicals in the environment
  - Other modern health worries
  - Miller & Watson (2007) BMJ, 32: 569

Press reports

Pain drugs get addiction warning

Over the counter painkillers containing codeine can become addictive in just three days, the government’s drug watchdog has said.

Need to ‘translate’ PIL lists of all possible side-effects into relative risk assessments

How does the prevailing dialogue around medicines safety influence public perceptions of medicines?

Pharmacy has a key role in medicines safety


Safety is important but should not take the highest priority. We need to ensure the majority of benefit to patients is equally prevalent.

Harm may be more noticeable.

Need to be careful that we balance reports of medicines safety with medicines efficacy and benefit.
Satisfaction with Information about Medicines Scale (SIMS)²

A valid and reliable method for identifying unmet information needs
1. Information about practical aspects of medicine use
2. Information alleviating concerns about negative effects of medicine
17 items derived from Association of the British Pharmaceutical Industry (ABPI) recommendations for essential information to ensure safe effective use of medicines

Figure: Disatisfaction with information about medicines

- **a) Action and usage**
  - [Graph showing dissatisfaction levels]

- **b) Potential problems**
  - [Graph showing dissatisfaction levels]

**Patient-centred pharmaceutical care: How might it look in practice?**

- **PATIENTS OFFER**
  1. Decide to be involved in treatment decisions
  2. Prescribe for medicines
  3. Information needs
  4. Capacity and resources to adhere to treatment

- **We need to**
  1. Identify individual needs and preferences
  2. TAILOR intervention to:
     - Address misconceptions, concerns and information needs
     - Address practical problems reducing patient's ability to adhere to medicines
**Quality indicators for patient-centred pharmaceutical care**

1. Facilitate honest, no-blame disclosure of nonadherence
   - Beliefs about Medicines Questionnaire (BMQ-Necessity)
3. Elicit and address specific medication concerns
   - Beliefs about Medicines Questionnaire (BMQ-Concerns)
4. Address outstanding information needs
   - Satisfaction with information about Medicines Scale (SIMS)

**CONCLUSIONS**

1. Medicine adherence and adherence is strongly influenced by patients' beliefs about medicines
2. Evidence from chronic long term conditions and in different countries and cultures shows that patients are often more sceptical about medicines than those prescribing and providing medicines
3. The concept of pharmaceutical care focuses on patient involvement
4. Implementing this concept in practice will require pharmacists to assess, address and monitor patients' medication-related beliefs and behaviour in order to tailor pharmaceutical care to individual need
5. A range of valid and reliable assessment tools are available to do this and could inform the development of quality indicators
Added value of assessing the quality of Pharmaceutical Care in Europe: pharmacists’ perspective

Dr Balázs HANKO PhD
Vice-president, Europharm Forum

Society and the health care sector are facing challenges: eg unhealthy lifestyle, which is responsible for the 7 leading risk factors in DALY; the high ratio of undiagnosed chronic diseases. Drug-related problems are also responsible for several cases of ineffectiveness. Several studies show inadequate use of medication, and low health literacy is significantly associated with misunderstanding. It is estimated that almost 200,000 patients die in the EU as a consequence of non-adherence, and more than 5% of the unplanned hospital admissions are medication-related. These data clearly indicate a huge quality gap in the health system.

The Pharmaceutical Care concept of pharmacists is a definite answer for these challenges to society and the health system. From the first definition of Pharmaceutical Care by Hepler and Strand in 1990, many international (FIP, EuroPharm Forum, PCNE) and national definitions have been born. Some of them focus on Drug Therapy Management, some take a more holistic (primary, secondary prevention) approach.

The outcome of systematic literature review, between 2004 and 2007, confirms that the contribution of community pharmacists improves public health in cardiovascular diseases, diabetes, hypertension care, obesity and other health topics. Besides this evidence, European pharmacy organisations are building up country registers and international knowledge exchange networks where ongoing national Pharmaceutical Care programmes are collected.

These Pharmaceutical Care programme implementations are supported by country knowledge exchange and European guidelines such as the EuroPharm Forum protocols on diabetes, asthma, hypertension and, the latest, on the metabolic syndrome.

The role of indicators in the Pharmaceutical Care process is crucial to provide quality and to be measurable and comparable. In the health care system “Donabedian”, the “structure – process – outcome” model is well known and accepted. These indicators can be easily adapted to the Pharmaceutical Care protocols at patient, pharmacy, national and international levels. Country experiences show that the collection of adequate indicator data is often limited because of lack of documentation and a low level of feedback.

The need of assessing the quality of Pharmaceutical Care is unquestionable, because it leads to quality improvement, standardisation and also the reimbursement of cognitive services. This is how pharmacists can prove their added value as a health care provider in public health.
Dr Balázs HANKO
EuroPharm Forum
Pharmacist’s perspective

Added value of assessing the quality of pharmaceutical care in Europe
pharmacists’ perspective

Content
1. Society needs
2. Pharmaceutical care
3. Evidences – pharmacists interventions
4. Indicators

1.1. Society needs
- primary prevention -

1.1.1. Lifestyle factors

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Score out of 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>8</td>
</tr>
<tr>
<td>Smoking</td>
<td>6</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>2</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>2</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
</tr>
<tr>
<td>Physical activity</td>
<td>0</td>
</tr>
</tbody>
</table>

1.2. Society needs
- Undiagnosed chronic diseases – secondary prevention -

- Three European cities (Aarhus, Italy, London) of the population with high blood pressure were
  - 50% of them were newly diagnosed
- The world of undiagnosed diabetes is around 15%
- The average prevalence of diabetes of 2% in adults

1.3.1. Society needs
- Drug related problems

- Increasing OTC consumption but!
  - Exhibits public awareness
  - 20% upwards consumption of OTC medications in 20 years
  - 70% of patients prefer OTC medications

- Overdosing risk
  - Risk of overdose
  - OTC medications higher than for physicians

- High health literacy
  - Health education and promotion
  - Pharmacist’s role is not yet recognized

1.3.2. Society needs
- Drug related problems

- Pharmacist’s role
  - 30 years in Europe
  - Very few OTC medications
  - Average reduction cost per patient: 45%
1.4. Difference between efficacy and effectiveness - Quality gap -

- Can pharmacists add value to society by bridging these gaps, solving these problems?

- Will society accept this?
- Will society reward this?
- Will pharmacists accept the challenge?

2. The pharmacists' answer is pharmaceutical care development in terminology -

- "Assessment of drug therapy for the purpose of achieving desirable outcomes that improve a patient's quality of life" (WHO)
- "...pharmacist practice...to promote health, prevent illness, and treat illness...and modify medication use...within realistic economic constraints..." (AAPA)
- "...recognizable function of pharmacotherapy...to facilitate processes that permit to prevent or ameliorate disease and improve quality of life..." (FP)

2.1. How can pharmacists provide pharmaceutical care to every patient?

3.2.3. Hungarian regulation concept

- Basic level services
- Advanced level services
- Implementation of the concept
- Evaluation of the concept
- Pharmacists' training
Content
1. Society needs
2. Pharmaceutical care
3. Evidences – pharmacists interventions
4. Indicators

3. A guide to evidence

3.1. Evidences – literature review
- The Contribution of Community Pharmacy To Improving The Public’s Health
- Literature review (2004-2007 EBM criteria)
  - CVD (COPD, COP, COPM, COPMUS, COPMUSUS)
  - Risk reduction, better disease control, higher satisfaction
- Diabetes care (11 studies, 26 studies project)
- Pharmacists, 2005, France et al., 2007. Sanchez et al., 2009
- Better disease control and care
  - Better disease control
- Hypertension care, 2003
- Significant blood pressure reduction
- Other
  - Obesity, 2003: Diabetes, CVD, etc.

3.2. Evidences – country examples

4. Why do we need indicators
- To be measurable and the guarantee of quality
- Numerous indicators and systems
  - Distribution-related
    - Process, outcome, quality
  - Main types
    - Performance-based indicators, etc.
- We need different indicators for everyday clinical and advanced pharmaceutical care activities.
4.1. Examples of indicators

4.2. Practical challenges with indicators - documentation

4.2. Practical challenges with indicators - feedback

The use of Information Technology!
4.2. Practical challenges with indicators - feedback

www.psnc.org.uk/statistics

- 146,900 THCerts completed year 1
- 287,520 THCerts completed year 2
- 1,394,658 THCerts completes year 3
- 51% THCerts completed limited to 33% on June 30
- 19.01% pharmacists accredited to provide NPSs
- June 30
- ... and patient feedback is very positive!

Summary

- Added value of assessing the quality of pharmaceutical care
- Added value of pharmaceutical care
- Evidence exists
- Development in the international, and national practices
- Added value of assessing indicators
- Way to
- Quality improvement, standardization
- Remuneration of cognitive services
- Health care provider, and health service model

That it is now pharmacists can prove their added value to public health
and measure real efficiency.

Thank you for your kind attention!
Doctors’ – general practitioners/family physicians’

Dr Isabel CAIXEIRO
European Union of General Practitioners (UEMO)

Family Doctors’ perspective
Isabel Caixeiro
President of European Union of General Practitioners/Family Physicians

UEMO objectives
- study and promote the highest standard of training, practice and patient care within the field of general practice throughout Europe;
- defend the role of general practitioners/family physicians in the healthcare systems;
- promote the ethical, scientific, professional social and economic interests of European general practitioners/family physicians, and to ensure their freedom of practice in the interest of their patients;

Countries
- Austria
- Belgium
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- Finland
- Germany
- Hungary
- Ireland
- Iceland
- Italy
- Luxembourg
- Malta
- Netherlands
- Norway
- Portugal
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- The Netherlands
- Turkey
- United Kingdom
- Czebrer
- Lithuani

Health Care Systems
Challenges due to:
- accessibility & equity
- lack coordination between levels of care
- responsiveness to patients’ needs
- patients more informed
- secrecy of resources
Health Care Systems

New problems:
- new pathologies/health threats
- unnecessary treatments
- medicalization/defensive medicine
- patient safety

Health Care Systems

New needs:
- anticipatory medicine and prevention
- focus on health gains
- health management in quality and expectancy of life (aging)
- tackle health conditions at early stages
- new requirements from technology (new drugs, devices, IT)
- act and monitor about health risk factors

Broad consensus...

STRONG PRIMARY CARE

but... from country to country the same needs have very different answers, diverse funding methods and organizational mechanisms.

Primary Care in Europe

- primary care activities similar in most countries
- very diverse organizational systems
- some health systems formally based on primary care (UKPP as gatekeepers)
- some primary care settings have also differentiated services available or allow direct access to other specialists

Substantial differences

- Financing structures (Bismarck, Beveridge and former Shemaasko models)
- Model of governance
- Professional roles and providers
- Professional organizations' intervention

Substantial differences

- Financing structures (Bismarck, Beveridge and former Shemaasko models)
- Model of governance
- Professional roles and providers
- Professional organizations' intervention
needed new answers

- reshape of healthcare settings
- "patient-centered" approaches
- more prevention/behaviour influence
- multidisciplinary actions
- orientation to health gains

“Old? New?” partnerships

- Healthcare is done by health professionals
- Knowledge and competence are key issues to quality
- New demands need more qualified professionals

Doctors-Pharmacist-Nurses

- Basic triangle of healthcare
- Interdependent actions
- Mutual recognition autonomy
- Specific tasks and expertise
- Join efforts to patient satisfaction
- Need clear communication

Pharmaceutical Care

- For doctors is:
  - Cooperation in therapy management
  - Helping patient in doubts about their medication
  - Safety net against mistakes
  - Reinforce for therapeutic compliance
  - Feedback about adverse effects and/or therapeutically failures

Pharmaceutical Care

- For doctors is NOT:
  - Task shifting
  - "pharmaceutical prescription"
  - Mixing of independent roles
  - Inter-professional dispute
  - Different "stories" for patients

Family doctors - Pharmacists

- Share close relation with patients
- Have Patients’ trust
- Act in "front-line" of health systems
- Practice is embedded in community
Family doctors - Pharmacists

- Need:
  - to coordinate efforts
  - establish common goals, co-participated by patients
  - proper channels for communication
  - have clear and mutual understanding of their independent (but complementary) roles

Way forward

- Professionals' organizations have an active role to develop:
  - National level
  - European level

UEMO is available to closest cooperation with other health professions organizations, namely with pharmacists.

Thank you

Isabel Caixeiro
UEMO - European Union of General Practitioners/Family Physicians
The social and health care sector is facing rising levels of risk while treatment practices are developing and patient care is becoming more challenging. Provision of care and pharmacotherapy in the home and in non-healthcare settings is also an increasing challenge. Pharmacotherapy practices within the health and social care sector vary and not all staff have been trained in pharmacotherapy as part of their basic training.

The purpose of the Finnish National Guide for Pharmacotherapy in Social and Health Care issued by the Ministry of Social Affairs and Health in 2005 is to harmonise the principles for the provision of pharmacotherapy, to clarify lines of responsibilities and to ensure and maintain knowledge and skills of the staff. The guide lays out general principles for the provision of safe and high-quality pharmacotherapy and discusses requirements placed on the care provided in social and health care operational units and service environments where pharmacotherapy is not routinely carried out. The guide defines also responsibilities in the provision of pharmacotherapy and certification of knowledge and skills of different personnel groups. Strengthening cooperation with hospital pharmacies and medicine centres is emphasized, too. Attention is given also to patient information and advice as well as to the assessment of the effectiveness of treatment.

The guide provides three practical tools to improve procedures of safe pharmacotherapy in health and social care organizations: (1) preparation of a plan on planning and management of pharmacotherapy, (2) assessment of risks associated with pharmacotherapy process from the perspectives of the physician, the staff, home nursing, pharmacy and the patient and (3) establishment of an error reporting system and a mechanism to learn from the errors. Nurses´ participation in the medication review is also included in the guide. Management teams of the organizations are responsible for organizing the preparation of the plan.

In addition, the Association of Finnish Pharmacies have developed an electronic form of the pharmacotherapy plan for social care units and a model for consulting the pharmacy is under development. E-learning programmes on pharmacotherapy have been introduced by universities of applied sciences and hospitals. A development project on medication administration qualification was initiated by the Arcada University of Applied Sciences in 2002. Universities of applied sciences have developed under the Turku University of Applied Sciences a national medication passport in order to ensure the students´ medication competence in the polytechnic degree programmes in nursing.
Ms Marjukka VALIMIES-PATOMÄKI
Ministry of Health, Finland
Nursing professional’s perspectives
Health authorities’ patients’ perspective

Ms Gudrun BUSCH
Federal Office of Public Health, Switzerland

Vision of Federation
1. High-quality community and institutional healthcare at appropriate costs for all population groups
2. Taking a leading role in regard to quality assurance
3. Coordinating present and future tasks, ensuring clear sharing of tasks between stakeholders, defining responsibilities and coordination between the different interests (municipalities - cantons - insurers - others)

Aims
- Objectives for service providers:
  - Reliable, efficient, patient-centered, timely, efficient, equal access for all (equitable)
  - Criteria for assessment and the establishment of measures for improving the quality of healthcare (prevention of health care).

Activity 1: Leadership and responsibility/accountability
The Federation accepts leadership & provides the necessary basis for the efficient carrying out of the tasks (roles) at the different levels of the hierarchy. Means: setting-up of appropriate federal structures.

Activity 2: Implementation – competences and resources
- Federation implements the quality strategy
- Permanent improvement
- Development of cooperation for the implementation of quality strategy
- Clear allocation of responsibilities and tasks

Activity 3: Information
- Hospitals, public health authorities, etc.
- Systematic data collection and analysis
- Feedback on the quality system
- Continuous improvement

“Knowledge is power. It’s not a gift, but it’s free. The knowledge things are what cost money.”
- Chinese proverb

“Knowledge is power. It’s not a gift, but it’s free. The knowledge things are what cost money.”
- Chinese proverb
Activity 4:

Incentives

- Federation
- Support for initiatives comprising incentives for quality improvement

"If you see somebody behaving that you like it and if you want to see more of it, then give a reward."

Activity 5

Design: healthcare system

- Improving sustainability of the quality orientation of the providers’
  chain through
- Replacing the fragmented approach of particularly providers’
  processes with integrated and comprehensive approaches.

"Moving faster in the worst way" W. Edwards Deming (demand to be Editor of Total Quality
Management ("Deming Cycle").

Activity 6

Research: supply and care (evaluation of implementation)

- Federation: identification of needs
- Monitoring of effectiveness, appropriateness, efficiency, of priority
  programmes and individual measures for quality improvement

"Quality is no hazard, it is always the result of intense thinking" John Ruskin (english Art critic, Artist)

Activity 7

Training & Education

- Federation: in accordance with its responsibilities.
- Implement the topics: quality, patient safety, quality assurance /
  management, clinical, management, in training and education of
  healthcare person as obligatory components

"People do not safety. Everyone can be a safety expert" Prof. Charles Vincent.

Activity 8

Patient & General public involvement

- Availability for the general public: valid, user-friendly information
  for choosing service offers and judging on the quality of the
  provision of healthcare
- Considering the needs of the general public, in particular patients,
  on developing and implementing measures for the
  improvement of the quality.

"Give them Quality. That’s the best way of Marketing." - Henry David Thoreau (1817-1865, successful american
  entrepreneur)

Activity 9

Direct intervention

- Federation: leadership as regards identification, prioritization, selection of hotspots
- Problem solving: short/medium-long-term programmes with clear
  objectives (hot spots)

"Heroes will never help those who do not want to act." - Sophocles (496-405 v.Chr., griech. Tragödienschriftsteller)
Implementation: Federation-leadership

Setting up necessary conditions (e.g. legal provisions, structures, human and financial resources).

Processes, facilitating implementation through integrating the different user groups (definition of roles).

Evaluating foreseen options for action and setting up programmes of activities.
Added value of assessing the quality of pharmaceutical care in Europe: patients' perspectives

Ms Joanna GROVES
Chief Executive Officer, IAPO

Patients', families' and careers' priorities are different in every country and in every disease area, but from this diversity there are some common needs including the provision of patient-centred pharmaceutical care. Health systems in all world regions are under pressure and cannot cope if they continue to focus on diseases rather than patients as healthcare requires the involvement of individual patients in an active way to take their medicines correctly, make behavioural changes and self-manage. The International Alliance of Patients' Organizations1 (IAPO) supports and encourages the role of patients' organizations in promoting patient-centred healthcare as an appropriate way to improve health outcomes for patients2. Engaging patients and the organizations that represent them – patients' organizations - in health policy decision-making helps to ensure that policies reflect patient and caregiver needs, preferences and capabilities and provide the most appropriate healthcare.

IAPO's origins stem from the realisation that patients' organizations all face some common healthcare issues, regardless of their countries of origin and disease area. In the global context issues of access to treatment, patient safety, patient involvement in health policy, health communication and information are key to patient-centred healthcare. IAPO believes that patients' voices are amplified and heard effectively when patients' organizations are linked, can share best practices and practical strategies, and are connected with resources.

This presentation will focus on:

- The importance of quality patient-centred pharmaceutical care from a patients' perspective including consideration of what patients need and use information for
- IAPO's vision of patient-centred healthcare outlined in IAPO's Declaration for Patient-Centred Healthcare3
- The roles of patients and health professionals and the core competencies that they require in order to work in partnership towards improved health outcomes and quality of life for the patient
- Important principles and approaches which can be employed towards quality patient-centred pharmaceutical care such as health literacy principles and patient engagement strategies
- Relevant initiatives IAPO is involved in with on a European and International level.

1 IAPO is a patient-led global alliance of 200 organizations. Our full members are patients' organizations. Together our members represent at least 365 million patients worldwide. Further information about IAPO's members is available online at www.patientsorganizations.org/membership.
2 There is growing evidence that patient-centred healthcare promotes greater patient responsibility and optimal usage which ultimately leads to improved health outcomes, quality of life and patient satisfaction (see IAPO (2005) What is Patient-Centred Healthcare?: A Review of Definitions and Principles available online at www.patientsorganizations.org/pchreview).
3 IAPO's Declaration on Patient-Centred Healthcare outlines five principles essential for patient-centred healthcare which resonate with patients' organizations globally and on which the healthcare system must be based if it is to appropriately address the needs of patients: 1 Respect for individual's unique preferences and needs; 2. Choice and empowerment; 3. Patient involvement in health policy; 4. Access and support; and 5. Information that is accurate and presented in an appropriate way. Available online at www.patientsorganizations.org/declaration.
Ms Joanna GROVES

International Alliance of Patient Organizations (IAPO)

Patient’s international perspective

1. About IAPO
   - Unique global alliance of national, regional and international groups representing patients
   - Established in 1993
   - Crossing borders and diseases
   - Vision: Patients throughout the world are at the centre of healthcare
   - 200 Member organisations
   - Present in 163 countries and all world regions
   - Representing an estimated 365 million patients

2. What is patient-centred healthcare?
   The IAPO Declaration on Patient-Centred Healthcare outlines five principles:
   - Respect and support for the individual patient, their views, preferences, values, needs and rights
   - Patient empowerment
   - Patient involvement in health policy
   - Information and communication
   - Access and support
   - Prevention and a community health orientation

IAPO’s Core Values
- Equity and access
- Patient empowerment
- Evidence-based medicine
- Collaboration
- Accountability

3. Assessing the quality of pharmaceutical care in Europe — patients’ perspectives
   What do patients want and need?
   - To know what the expected benefits will be and how they will improve health and quality of life
   - To know about any possible side effects and what to do if they experience a different reaction than that prescribed
   - To help how to take the medicine correctly and how to handle treatment regimens in case they feel their lives

Content of Presentation
1. A short introduction to the International Alliance of Patient Organizations (IAPO)
2. What is Patient-Centred Healthcare?
3. Assessing the quality of pharmaceutical care in Europe — patients’ perspectives
4. The roles of health professionals and patients
5. Patient engagement
6. Some related initiatives
4. The role and responsibilities of health professionals and patients

The role and responsibilities of health professionals:
- To be a vital source of information
- To provide expert advice and guidance
- To be a driver for change

The role and responsibilities of patients:
- To take care of one's own health
- To seek advice from health professionals
- To adhere to the chosen treatment

Health literacy principles
- The message shall be clear and understandable
- The content relevant and tailored
- The format culturally and linguistically appropriate
- There is involvement of reader, writer or listener
- The focus on key audiences is key

5. Patient Engagement

- What is patient engagement?
- Reality or rhetoric?
- Representatives
- The contribution of patient organizations
- Moving forward:
  - Acknowledge
  - Review
  - Next...

IAPO’s Guidelines for Patient Engagement
1. Identify scope and set out the objectives
2. Identify appropriate patient representatives
3. Encourage participation and motivate
4. Determine appropriate methods of involvement
5. Offer support to enable involvement
6. Provide information, education and training
7. Evaluate the project - ensure that it makes a difference
8. Evaluate the project
9. Recognize involvement
10. Position internal frameworks
11. Establish a network

www.patientorganizations.org/involvement

6. Some related information and initiatives

- FP6 Working Group on Patients as Partners
- Council of Europe Committee on Ocular Health Medicines
- Patients for Patient Safety, part of the World Health Organization Patient Safety Programme
- IAPO Patient Safety Toolkit: including sections on:
  - The development of evidence-based documents
  - Improving the quality and safety of medicines
  - Information on essential medicines and self-patient safety
- IAPO Policy Statements and Guidelines:
  - Audit Group
  - Policy Development
  - Model Statement

Further information is available at www.patientorganizations.org/policy

Conclusions
- Communication is key
- Improved communication needs well-informed patients and well-informed health professionals
- Improved health outcomes requires cooperation
Contact us

Please visit our website to find out more:
www.patientorganizations.org

If you would like to receive our monthly e-newsletter and details of other publications, please send your details to:
International Alliance of Patients’ Organizations
103 The Chandlery
25 Bridge Street
London SE1 7OP

Tel: +44 20 7231 7508
Fax: +44 20 7231 7509

email: info@patientorganizations.org
website: www.patientorganizations.org
Session theme: «Assessment tools including indicators: What has been done so far?»
Session Chair:

Mr Nico KIJLSTRA
Dutch Health Care Inspectorate, Netherlands

Speaker:

Prof Peter NOYCE
Manchester University, United Kingdom
The challenge of assessing quality in community pharmacy is used to illustrate the diversity of perspectives and approaches that have been adopted in the last 10 years\(^1\), and to describe a study to develop quality indicators.

Campbell et al (2000)\(^2\) consider there are two dimensions to the quality of care for individual patients; access and effectiveness. Effectiveness has two components: effectiveness of clinical care and effectiveness of interpersonal care. These are considered within the conventional Donabedian quality framework of structure, process and outcome. This approach has been adopted to develop a conceptual framework of quality for community pharmacy and as a structure for developing quality indicators.

The stages, activities and players in the conventional medication system are then considered and the part played by formative studies is described in the development of quality measures of pharmaceutical care.

The conclusion is a reminder of the present need to develop quality indicators for pharmaceutical care by reference to the contemporary policy commitments of the English Department of Health.

---


Prof Peter NOYCE
Manchester University, United Kingdom

Approaches to quality measurement in pharmacy, including indicator development

Approaches to quality measurement in pharmacy, including indicator development
Peter Noyce
Professor of Pharmacy Practice
University of Manchester, UK.

Quality of care for individuals is determined by:
- Access (can the patient reach the necessary care?)
- Effectiveness (how appropriate is delivered care?)
- Clinical care
- Interpersonal aspects of care

Quality of care for populations is determined by:
- Equity
- Efficiency

Assessing quality in community pharmacy
- Systematic literature review and critical appraisal of existing organisational assessment tools
- Development of conceptual framework of quality in community pharmacy setting
- Development of quality indicators

Framework for quality assessment of health care
- Structure
- Process
- Outcome

Donabedian A (1990)

Conceptual framework

<table>
<thead>
<tr>
<th>Community pharmacy (Outcomes)</th>
<th>Patient-oriented care (Processes)</th>
<th>Consequences of care (Outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>Availability</td>
<td>Patient satisfaction/acceptability</td>
</tr>
<tr>
<td>Availability and accessibility</td>
<td>Providing access to medication and advice</td>
<td>Health status</td>
</tr>
<tr>
<td>Health status</td>
<td>Compliance</td>
<td>Comorbid health</td>
</tr>
<tr>
<td>Comorbid health</td>
<td>Effectiveness of service provision</td>
<td>13 less prevented</td>
</tr>
<tr>
<td>13 less prevented</td>
<td>Effectiveness of service provision</td>
<td>13 less prevented</td>
</tr>
<tr>
<td>Effectiveness of service provision</td>
<td>13 less prevented</td>
<td>13 less prevented</td>
</tr>
</tbody>
</table>
Development of indicators for community pharmacy

- Literature review identified 435 possible indicators which mapped into the conceptual framework.
- Rated in four separate Delphi questionnaires by 84 community pharmacists, or employees of primary care organisations involved with community pharmacy.

1. Pharmacy setting, equipment and facilities
2. Access to services, advice and medicines
3. Effectiveness of care and services
4. Management, training and leadership

Quality indicators

- Explicitly defined and measurable items referring to the structures, processes or outcomes of care.

Principles of development

- Which aspects of care to assess?
  - Structures (staff, equipment, etc.)
  - Processes (dispensing, consultations with patients, etc.)
  - Outcomes (health status, patient satisfaction, etc.)

- Availability of supporting evidence

Conventional medication system

Prescribing

- Choice of drug, dose, product type
- Appropriateness of whole medication regimen
Medical Practitioner: pharmacist, nurse, etc.

Dispensing

- Review appropriateness of prescription
- Supply prescribed medicine
- Advise and also advise patient, and encourage adherence
Pharmacist

Administration of medicines
Patient, carer, nurse

Quality measurement of pharmaceutical care: formative studies

Quality of procedures
1. Indicators of the appropriateness of long term prescribing in general practice in the United Kingdom: consensus development, face and content validity, feasibility and reliability

2. Appropriateness measures of application to sibutramine giving in community pharmacy

Quality of outcomes
3. Preventing drug-related mortality – determining valid indicators

Policy Context

"The Government will also work with the NHS and professional bodies to develop a set of pragmatic, easily measurable metrics or indicators that will serve to demonstrate the quality and outcomes of pharmacy service provision."

These indicators could.....

- form the basis of providing incentives for quality of service provision
- be utilised to help capture the performance of individual clinicians
- be utilised to indicate where support may be needed to address poor performance.
Adherence to pharmaceutical care practices and guidelines
Translating guidelines into practice

Pharmaceutical care
- Direct involvement of the pharmacist in the design, implementation, and monitoring of a therapeutic drug plan to produce a specific therapeutic outcome
- Evidence based pharmacy or evidence based practice

EBP takes time
- The volume of medical literature doubles every 10 years
- 10,000 citations added to MEDLINE/day
- Keeping up with relevant primary literature is a challenge (understatement?) or futile (overstatement?)
- Quality shortcuts are valuable and necessary

Clinical Practice Guidelines
What are they?
- A systematically developed statements to assist practitioners and patient decisions about appropriate health care for specific clinical circumstances

Clinical Practice Guidelines
What are their purpose?
- Attempt to distill a large body of medical knowledge into a convenient, readily usable format
- CPGs are not simply an efficient resource for practitioners
  - Promote rational, evidence-based practice
  - Reduce inappropriate variations in care
  - Identify gaps in knowledge (future research)
  - Evaluate individuals or groups

Clinical Practice Guidelines
What are the effects?
- When written carefully, CPGs can offer guidance on treatment options based upon the established effectiveness of available therapeutic options (including no treatment), a patient's individual clinical situation, minimization of harm, and cost.
Effectiveness of CPGs in Improving Clinical Outcomes:

"...some evidence that guideline-driven care can be effective in changing the process and outcome of care provided by professions allied to medicine."

Thomas, Curr. Opin. Crit. Care 6, 311-316, 2000

The implementation problem

- Many patients (estimated 30-45%) do not receive recommended (evidence-based) care
- 20-25% of tests ordered or medications prescribed are not evidence based, unnecessary and potentially harmful
- Many patients harmed because of adverse events, partly caused by not using evidence-based guidelines
- Large, unexplained differences in the use of guidelines between sites and providers

Achievement rates aggregated by domain, adjusted for weighted data, multistage sampling, and multiple indicators per participant.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rate of quality indicated</th>
<th>Rate of quality indicated adjusted</th>
<th>Rate of none quality indicated adjusted</th>
<th>Rate of none quality indicated adjusted adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed consent</td>
<td>0.88</td>
<td>0.88</td>
<td>0.56</td>
<td>0.56</td>
</tr>
<tr>
<td>Pain control</td>
<td>0.56</td>
<td>0.56</td>
<td>0.32</td>
<td>0.32</td>
</tr>
<tr>
<td>Temperature</td>
<td>0.88</td>
<td>0.88</td>
<td>0.56</td>
<td>0.56</td>
</tr>
</tbody>
</table>
Guidelines in general practice: the new Tower of Babel?
- 855 different guidelines in the U.K.
- This produced a pile of 63 cm and weighing 28 kg
- 150 were more than 10 pages and 25 were over 100 pages

The mass of paper represents a large amount of information, but it is in such an unmanageable form that does little to aid decision making.

Barriers to Adherence to Practice Guidelines in Relation to Behavior Change

Barriers related to
- Knowledge: “Can I really be honest to you? I have never read the guideline.”
- Attitude: “I do not have experience treating hyperthyroid patients and only see few of them per year. I think this is not sufficient to build up expertise.”
- Behavior: “This recommendation is obsolete.”

Factors associated with the effective implementation of Clinical Practice guidelines

<table>
<thead>
<tr>
<th>Barriers to implementation</th>
<th>Strategies to address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Education</td>
</tr>
<tr>
<td>Cost</td>
<td>Communication</td>
</tr>
<tr>
<td>Social</td>
<td>Feedback</td>
</tr>
<tr>
<td>Structural</td>
<td>Environment</td>
</tr>
</tbody>
</table>

Implementation of guidelines: the evidence
- Designers of systematic reviews show (Crouch & Crimshaw, 2003): Crimshaw. The evidence that one of many, many approaches to clinical practice appear in all situations, most are guidelines.
- Change even all interventions usually lead to changes in patient care.
- Not all guidelines and change interventions are effective for some guidelines in some settings and not for others.
- We lack research on new, interesting approaches.

Two issues
- Creating a structure and context for implementation of guidelines and changes in patient care.
- Engaging professionals in using guidelines and improving practice.
The SepNet project

Methodology:
A prospective observational cross-sectional study.
204 patients from 9 ICUs were included in the study.
C&D data were collected over a 3-month period.

1. Patients were divided into three groups:
   - Group A: receiving standard care
   - Group B: receiving enhanced care
   - Group C: receiving intensive care

2. Data were collected on:
   - Patient demographics
   - Mortality rates
   - Length of stay

3. Results:
   - Group A had the highest mortality rate (30%)
   - Group B had a lower mortality rate (20%)
   - Group C had the lowest mortality rate (10%)

4. Conclusion:
   - Intensive care units should receive additional support.

---

Practice and perception

Fig. 1: Results of a survey on the perception of pharmacists regarding the implementation of current guidelines.

- 80% of pharmacists felt underutilized.
- 70% believed their work was not recognized.
- 50% reported feeling undervalued.

---

Is there a contribution of Pharmaceutical Care?

Clinical result
- Improved patient outcomes
- Decreased hospital stay

Economic result
- Reduced medication costs
- Increased patient satisfaction

Humanistic result
- Enhanced patient care
- Improved patient outcomes

---

In God I trust, for everything else please show me the data.

---

Is there a contribution of Pharmaceutical Care?

- In 1997 the Cochrane published a review, in which they stated that only a limited number of studies support the further expansion of pharmacists' roles in delivering patient counseling regarding drug therapy and educating physicians about drug therapy.

---

Peter Drucker

"If you don't measure it, you can't compare it!"

---

Indicators

69
Any Questions?
Panel session:
Experiences with the implementation of assessment tools including indicators and the use of information for improving health policy-making and improvement of professional standards
Pharmaceutical care defined by Helper and Strand as the responsible provision of drug therapy of the purpose of achieving definite outcomes that improves a patient’s quality of life has gained wide acceptance. One major cornerstone to improve patient’s quality of life is the adherence of medicine therapy to guidelines based on the best available evidence. Despite wide promulgation, treatment guidelines have had limited effect on changing behaviour. In general, little is known about the process and factors responsible for the change of practice methods.

Adherence to guidelines may be hindered by barriers. There are a variety of barriers to guideline adherence, which include lack of awareness, lack of familiarity, lack of agreement, lack of self-efficacy, lack of outcome expectancy, the inertia of previous practice, and external barriers.

JAMA, October 20, 1999—Vol 282, No. 15

All of these barriers are defined as any factor that limits or restricts complete to a guideline and are focused on barriers that could be changed by an intervention. The first step would be to identify barriers in European countries and then to identify how pharmaceutical care can add significant values to improve adherence to guidelines. I strongly believe that pharmaceutical care can bridge the gap between what is known for good drug treatment and what is actually in praxis.
Dr habil. Michael HARTMANN

Universitätsklinikum Jena, Germany

Adherence to pharmaceutical care practices and guidelines

Adherence to pharmaceutical care practices and guidelines
Translating guidelines into practice

Pharmaceutical care
- Direct involvement of the pharmacist in the design, implementation, and monitoring of a therapeutic drug plan to produce a specific therapeutic outcome
- Evidence-based pharmacy or evidence-based practice

EBP takes time
- The volume of medical literature doubles every 10 years
- 19,000 citations added to MEDLINE/day
- Keeping up with relevant primary literature is a challenge (understatement?) or futile (overstatement?)
- Quality shortcuts are valuable and necessary

Clinical Practice Guidelines
What are they?
A systematically developed statements to assist practitioners and patient decisions about appropriate health care for specific clinical circumstances

Clinical Practice Guidelines
What are their purpose?
- Attempt to distill a large body of medical knowledge into a convenient, readily usable format
- CPGs are not simply an efficient resource for practitioners
- Promote rational, evidence-based practice
- Reduce inappropriate variations in care
- Identify gaps in knowledge (future research)
- Evaluate individuals or groups

Clinical Practice Guidelines
What are the effects?
When written carefully, CPGs can offer guidance on treatment options based upon the established effectiveness of available therapeutic options (including no treatment), a patient's individual clinical situation, minimization of harm, and cost.
Effectiveness of CPGs in Improving Clinical Outcomes:

"...some evidence that guideline-driven care can be effective in changing the process and outcome of care provided by professions allied to medicine."

Thomas Chicken, WCol. Rees-Mogg, South & West, 2005

![Graph showing effect of CPGs on clinical outcomes](image)

The implementation problem

- Many patients (estimated 30-45%) do not receive recommended (evidence-based) care.
- 20-25% of tests ordered or medications prescribed are not evidence based, unnecessary and potentially harmful.
- Many patients harmed because of adverse events, partly caused by not using evidence-based guidelines.
- Large, unexplained differences in the use of guidelines between sites and providers.

Achievement rates aggregated by domain, adjusted for weighted data, multistage sampling, and multiple indicators per participant.

<table>
<thead>
<tr>
<th>Domain</th>
<th>No. of quality indicators</th>
<th>No. of domains with indicators</th>
<th>No. of domains with achievement 80% or more</th>
<th>Total quality indicators achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enteric infection control</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Infection</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Treatment adherence</td>
<td>20</td>
<td>3</td>
<td>15</td>
<td>60</td>
</tr>
</tbody>
</table>

C. M. Kiv et al., New Horizons 1996

![Cartoon showing implementation issues](image)
Guidelines in general practice: the new Tower of Babel?
- 855 different guidelines in the U.K.
- This produced a pile of 68 cm and weighing 28 kg
- 150 were more than 10 pages and 25 were

The moon of paper represents a large amount of information, but lies in an unmanageable form that does little to aid decision making.

Barriers related to
- Knowledge: “Can I really be honest to you? I have never read the guideline.”
- Attitude: “I do not have experience in treating hyperthyroid patients and only see few of them per year. I think this is not sufficient to build up expertise.”
- Behavior: “This recommendation is obsolete.”

Factors associated with the effective implementation of Clinical Practice guidelines
<table>
<thead>
<tr>
<th></th>
<th>High Effectiveness</th>
<th>Low Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers</td>
<td>Internalised</td>
<td>Externalised</td>
</tr>
<tr>
<td>Strategies</td>
<td>Communication</td>
<td>Training</td>
</tr>
</tbody>
</table>

Implementation of guidelines: the evidence
- Developers of systematic reviews show (Clegg/Crombie 2003, Crombie 2000) that one of many, many approaches to successful implementation in all situations, most are guidelines.
- Change is an essential intervention, usually (but not always) involving education.
- Not only are some guidelines and change interventions are effective for some guidelines in some settings and not for others.
- We lack research on new, interesting approaches.

Two issues
- Creating a structure and context for implementation of guidelines and changes in patient care
- Engaging professionals in using guidelines and improving practice
The SepNet project

Is there a contribution of Pharmaceutical Care?

Clinical result

Economic result

Humanistic result

In God I trust, for everything else please show me the data.

Peter Drucker

"If you don’t measure it, you can’t compare it!"

Indicators
BREAK-OUT SESSIONS
BREAK OUT SESSION 1a

Understanding the pharmaceutical care concept and applying it in practice

Moderator:
Dr Sabine VOGLER
Gesundheit Österreich GmbH, Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitswesen (GÖG/ÖBIG)

Rapporteur:
Mr Max WELLAN
Austrian Chamber of Pharmacists
Health Systems – Policy Aspects
Understanding the Pharmaceutical Care Concept and Applying it in Practice
Report from a Scoping Exercise
Discussion on the way forward

Outline

Aims

Pharmaceutical care in Europe / 1

Pharmaceutical care in Europe / 2

Pharmaceutical care in Europe / 3
Specific diseases in pharmaceutical care

Pharmaceutical care is particularly applied in specific diseases:
- Cardiovascular diseases
- Diabetes
- Asthma
- COPD
- Others

Indicators / 1

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance/efficacy</td>
<td>Measurement of disease-specific pharmaceutical care programs.</td>
</tr>
<tr>
<td>Hospital admission, frequency of discharge</td>
<td>Measurement of disease-specific pharmaceutical care programs.</td>
</tr>
<tr>
<td>Number of interventions</td>
<td>Measurement — yes.</td>
</tr>
<tr>
<td>Number of drug-related problems / adverse events</td>
<td>Depending on vigilance systems.</td>
</tr>
</tbody>
</table>

Indicators / 2

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient satisfaction</td>
<td>Room for interpretation, different understanding</td>
</tr>
<tr>
<td>Regular patients / bed/patient pharmacy orientation</td>
<td>Subjective</td>
</tr>
<tr>
<td>Process indicators e.g. on dispensing, documentation, electronic doc., clinical pharmacy</td>
<td>Implementation is rather easily optimizable</td>
</tr>
<tr>
<td>Heart-related indicators, e.g. mortality, all-cause mortality</td>
<td>Subsequently FC?</td>
</tr>
</tbody>
</table>

Indicators / 3 - Concerns

- Documentation — number of data
- Attributable to pharmaceutical care (not a clinical trial)
- Comparability
- Cultural influence
- Level of PC is different in the countries
- Outcomes vs. process indicators

Indicators / 4 - General question

What is our aim?

Some countries are not so advanced in pharmaceutical care.
How can they be supported?

Indicators / 5 - Specific questions

- Do you share our perception of the indicators?
- Do you agree with our concerns?
- Would you propose other indicators not mentioned now?
- Should we focus on the outcome or process indicators?
- What do you think about a checklist with key elements of pharmaceutical care (process indicators) for supporting the implementation of pharmaceutical care?
Contact

Dr. Sabine Vogler
Head of Pharma Team
Gesundheit-Center GmbH
Staudinger 4, A-1210 Wien
Tel: +43 1 5155147
E-Mail: sabine.vogler@gcp.at
BREAK OUT SESSION 1b

Pharmaceutical care: the key role of patient needs, beliefs, values and self-management competences (medication-related health literacy)

Moderator:
Prof Han DE GIER
Pharmacotherapy and Pharmacological Patient Care, University Groningen, Netherlands

Rapporteur:
Ms Christiane RITSCHEL
Graduate Nurse, Nursing scientist, University of Applied Sciences Jena, Germany
Patient involvement and medication-related health literacy
An indicator for patient participation in pharmaceutical care

- Professor Han de Gier, Moderator
- Department of Pharmacoepidemiology and Pharmacoeconomics
- E-mail: hans.diegier@rug.nl
- Christine Riekel, Rapporteur
- Graduate School, Medical Faculty, University of Leuven

Development of a process indicator
- How to involve patients in pharmaceutical care?
- Communication between pharmacists and patients
- Keep it simple
- Define the numerator/denominator
- What data to collect and how?
- Assessment of face validity, reliability, feasibility, acceptance?

Definition of Pharmaceutical Care
- Pharmaceutical Care is the Responsible Provision of Drug Therapy for the Purpose of achieving Definite Outcomes that improve Patient’s Quality of Life
  (Hepler & Strand, 1990)
- Pharmaceutical Care is a Practice in which the practitioner takes Responsibility for a Patient’s Drug-related Needs, and is held Accountable for this Commitment
  (Young et al., 1998)

Translating Drug-related Needs into Drug Therapy Problems (Strand, 2010)

<table>
<thead>
<tr>
<th>Drug Therapy Problems (DTP)</th>
<th>(Strand, 2001, N = 26,238 Patient Evaluations)</th>
<th>Patient Evaluation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indication-Unnecessary Drug Therapy</td>
<td>4 %</td>
<td>88 %</td>
</tr>
<tr>
<td>Indication-No Need Additional Drug Therapy</td>
<td>28 %</td>
<td>72 %</td>
</tr>
<tr>
<td>Effectiveness-Ineffective Drug</td>
<td>9 %</td>
<td>91 %</td>
</tr>
<tr>
<td>Effectiveness-Drug Too Low</td>
<td>24 %</td>
<td>76 %</td>
</tr>
<tr>
<td>Effectiveness-Drug Too High</td>
<td>14 %</td>
<td>86 %</td>
</tr>
<tr>
<td>Safety-Adverse Drug Reaction</td>
<td>16 %</td>
<td>84 %</td>
</tr>
<tr>
<td>Safety-Drug too expensive</td>
<td>5 %</td>
<td>95 %</td>
</tr>
<tr>
<td>Compliance-Nonadherence</td>
<td>Total 100 %</td>
<td>19 %</td>
</tr>
</tbody>
</table>

Diagram: Translating Drug-related Needs into Drug Therapy Problems.
Communication will improve if
- Patients are invited to write down questions (paper/online)
- Several visits with a pharmacist are scheduled (in person/on-line)
- Questioning protocol is being used
- Inadequate medication-related health literacy can be detected

What is “Concordance”?
- Hypothesis or politically correct word for “compliance”
- It is about a process of shared decision-making
  - where the patient’s opinions, beliefs, and concerns are respected
  - The consultation can be defined as “non-concordant”, but not the patient
  - A patient can show “non-compliant” behaviour
Patient Provided Information

- "Studied have shown that 'subjective' health perceptions can be the best predictors of future longevity or mortality, better than the 'objective' measures by the physician..."? Facts only known by physicians need to be supplemented by values known only by patients."


Break

The right tool for the right moment

The Patient Care Process

ESTABLISH A THERAPEUTIC RELATIONSHIP

ASSESSMENT
- What does my patient want and need?

CARE PLAN
- What am I going to do for my patient?

EVALUATION
- How well was the plan working?

Continuous Follow-Up

Birnbaum 2006
Conclusions (1)

1. An indicator can refer to patient participation in the process of pharmaceutical care needs to focus on understanding of patient’s preferences as they want in consultation.
2. The concept of pharmaceutical care can be identified by inviting patients to indicate their individual needs before any consultation, and to access the proportion of consultations that patients have been for their needs.
3. It is essential for nurses to indicate their views for the consultation agenda so that the development of an appropriate consultation scenario can be designed to support consultation to ensure patient participation.

Conclusions (2)

4. Since most drug-related problems occur in patients with chronic disorders, the start of long-term treatment with medications at the start of a consultation, which patient participation would be monitored based on the application of the indicator.
5. An action plan is needed to investigate its feasibility, reliability, and acceptability of the proposed indicator that allows quality assessment of patient participation in various European countries.
BREAK OUT SESSION 3

Health interventions: Communication and interdisciplinary cooperation

Moderator:

Dr Afonso Miguel CAVACO
Faculty of Pharmacy, University Lisbon, Portugal

Rapporteur:

Dr Charlotte SALTER
University of East Anglia, United Kingdom
Breakout Session 3
Health Interventions

Communication and Interdisciplinary Cooperation

- Identify, clarify (incl. level & perspective)
- Interpersonal communication: interpersonal, relational, behavioral skills
  - Agree on a definition of patient-centered pharmaceutical collaboration
  - Define the interdisciplinary cooperation domain
- Continuity of care: interpersonal communication, cooperation
  - Agree on a definition of interdisciplinary collaboration

- Purpose (intended effect)
  - To reflect and quantify communication initiatives
  - List specific communication needs

Communication and Interdisciplinary Cooperation

- Point of application
  - Locally (place of work and contact with patients)

- Indicator selection
  - Identifying communication structure, process or outcome
  - Agree on structure (e.g., consult/attend consultation episodes, role in patient/patient interaction)
  - Agree on process (e.g., technical, clinical, support, outcomes, patient satisfaction, process satisfaction)

- Prioritization from selection

Communication and Interdisciplinary Cooperation

- PQA framework
  - Measure Category: e.g., patient information
  - Measure Title: e.g., written information rate
  - Measure Description: e.g., percentage of written information provided
  - Measure Definition: e.g., percentage of any piece of information given to the patient for his or her to deliver to the GP
  - Rationale: e.g., all pharmacist consultations should provide written information related to medication use or a doctor report on DOP
  - Data Source: e.g., written patient info delivered to each patient
  - Data Source: e.g., pharmacy register on pharmacist

Communication and Interdisciplinary Cooperation

- Measure Category: e.g., patient perception and satisfaction
- Measure Title: e.g., percentage of satisfied patients who have been informed of their care
- Measure Description: e.g., percentage of patient satisfaction with care received
- Measure Definition: e.g., percentage of informed patients who have received the expected service
- Rationale: e.g., all pharmacist consultations should meet patient expectations
- Decrement Description: e.g., number of patients expressing positive views on pharmacist care received
- Increment Description: e.g., all patients that have received pharmacist care

- Data Source: e.g., short questionnaires at the end of the pharmacist interview
Communication and Interdisciplinary Cooperation
**BS 3: Health interventions**

Monitoring and data linkage for safe prescription, drug use and traceability

---

**challenges**

- National patient ID, care provider ID, care facility ID
- National drug database with decision-support
- Definition of a shared patient summary
- Legal framework
- Incentives for the usage of these technologies
- Certification process of the tools
- National secured infrastructure

---

**deployment**

- CPOE Usage in care facilities, GP’s
- Usage of ePrescription
- Usage of a shared patient record
BREAK OUT SESSION 4a

Methodologies for indicator development, adaptation and use

Moderator:

Dr Martin HENMAN
School of Pharmacy, trinity College Dublin, Ireland

Rapporteur:

Mag. Peter WIENINGER
Federation of Austrian Social Insurance Institutions
**Topic Group 4. Methodologies:**
Indicator development, adaptation and use

**Aim of Council of Europe & EDQM**
- To improve public health care and practices involving pharmaceuticals... through specific programmes and policies, putting first the needs of patients and society in general, valuing the social and ethical context of healthcare...
- Pharmaceutical care implementation is central to achieving this aim.
- Pharmaceutical Care Report demonstrated that concordance was accepted and unopposed across a range of stakeholders and countries.
- Interpretation varied.
- Implementation limited.

**Indicators**
- Readily understandable measure of some aspect of health service performance.
- A measure of quality that can be used to track changes in quality in response to changing practices, service reforms, regulations or policies.
- "... used as basis for investigation to understand why differences exist and what can be done to reduce those differences and improve care in all countries."

**Beginnings**
- Structural and Process indicators would be the easiest to develop since data are often routinely captured for the purposes of health service management or regulatory requirements.
- Compiling the sources and types of data about pharmaceutical care and practice should be one of the first steps.

**Outcome Indicators**
- Final & intermediate: assess the effects of the patient's health, health status and quality of life of the care delivered.
- Pharmacists' independent practice – prescribing non-prescription & emergency medicines should be one target for indicator development.
- Intermediate outcomes sensitive to pharmacist interventions should be prioritised for development.

**Required Steps in Indicator Development**
- Identify Problem
  - What are you trying to know?
- Classify Problem
  - What sort of problem is it?
- Identify Level(s)
  - In which context(s) of the health service is it?
- Assess impact of indicator
- Indicators
  - What is a suitable measure and how can it be measured?
- Prioritise from selection
  - Should the possible indicators be prioritised?
- Test to confirm that they are:
  - Important & relevant.
  - Identifiable, sound & valid.
  - Usable.
  - Feasible.

[Image of a slide with text and bullet points related to indicators and development steps.]

94
Logic of Pharmaceutical Care Indicators

- Medicines are a ubiquitous and essential tool of health care.
- Medicines use and Pharmaceutical Care are patient-centred activities in which patients must have a voice.
- Indicators should measure quality of care for patients.
- Indicators for pharmaceutical care and practice would contribute to a more rounded view of the health systems of Europe.
- Indicators would promote continuous quality improvement in the use of medicines.

What is needed

- Build upon the widespread acceptance of pharmaceutical care and practice as essential components of patient care.
- Systematic programme of indicator testing.
- Engagement of multiple stakeholders.
- Collaborative application of expertise from several countries.
BREAK OUT SESSION 4b

Monitoring and data linkage for safe prescription, drug use and traceability

Moderator:

Prof. Christian LOVIS
University Hospitals of Geneva, Switzerland

Rapporteur:

Dr Johnny BENLEY
Institut Central des Hôpitaux Valaisans, Switzerland
BS 4: Health interventions

b) Monitoring and data linkage for safe prescription, drug use and traceability

challenges

- National patient ID, care provider ID, care facility ID
- National drug database with decision-support
- Definition of a shared patient summary
- Legal framework
- Incentives for the usage of these technologies
- Certification process of the tools
- National secured infrastructure

deployment

- CPDE Usage in care facilities, GPs
  - quality and safety of prescription, decision support
  - pharmacists
  - Usage of ePrescription
    - other, prescription is delivered to...
    - pharmacists
  - Usage of a shared patient record
    - legal framework, unique IDs, secure policies, can use datasets, health providers
BREAK OUT SESSION 5
Specific needs of regions in Europe

Moderator:
Mr Kees DE JONCHEERE
WHO Regional Office for Europe

Rapporteur:
Dr Zinaida BEZVERHNI
University, Chisinau, Moldova
Pharmaceutical services in Moldova: where do we stand?

Zoila Bechencu
State Medical and Pharmaceutical University
Department of Social Pharmacy
Republic of Moldova

Pharmaceutical sector in Moldova
- 3.6 mil. inhabitants (offload)
- 74 wholesalers (10 big, 5 having retail chain)
- 1891 community pharmacies
- 72 hospital pharmacies
- 53 areas without pharmacy
- 1886 inhabitants/Pharmacy
- >8000 products registered
- 17% dispense reimbursed medicines

Challenges for Pharmaceutical Care implementation
- Bad prescribing
- Rx/OTC blurred edge
- Uncontrolled self-medication
- Small number of reimbursed drugs
- Different prices for medicines

Material and methods
- 1564 inhabitants and 329 community pharmacists were interviewed
- Qualitative data were obtained from focus group discussions (n=50)
- Chi-square method has been used

Why visiting a pharmacy?
- 68% of inhabitants are permanent visitors of same pharmacy
- They visit the same pharmacy because:
  1. Convenient situation (47%)
  2. Large assortment (46%)
  3. Good prices (41%)
  4. Only 10% are visiting the same pharmacy because of the pharmacist

Organization of services
- Most of consumers and pharmacists consider that quality of services is better than before
- Major problem: impossibility of private discussion
**Informational support of drugs dispensing**

- There is a big gap in information provided by pharmacists and information expected by consumers.
- Pharmacists are focused on: mode of usage, storage and duration of treatment.
- On the other hand, consumers want: drug interactions, side effects.
- As consumers, either pharmacists consider that they have to offer more information about medicines.

**Requested pharmaceutical services**

- Informational service (60%)
- Healthy lifestyle promotion (54%)
- Blood pressure measurement (48%)
- Home delivery of medicines (44%)
- Blood cholesterol level measurement (42%)

**Provided services**

- Informational service is sometimes offered by pharmacists (60%) as well as some advices concerning healthy lifestyle (37%).
- Only 1/3 of younger pharmacists sometimes measure the blood pressure, and there are no cholesterol and glucose blood level measurement services in Moldova.
- There are no home delivery service in pharmacies, but there is first online pharmacy in our country.

**What to improve?**

- As pharmacists such consumers are univocal that professionalism of pharmacists and service quality have to be improved.

**Possible barriers**

- Lack of pharmacist and patient time
**What to do?**

- **Education:** Continuous education courses concerning Pharmaceutical Care
- **Professional association:** Model pharmacies/pharmacists
- **Authorities:** List of mandatory/essential pharmaceutical services

**How to evaluate the quality?**

**Prescribing indicators (WHO)**

- Average number of drugs per encounter
- Percentage of drugs prescribed by generic names
- Percentage of encounters with an antibiotic prescribed
- Percentage of encounters with an injection prescribed
- Percentage of drugs prescribed from essential drugs list or formulary

**Patient care indicators**

- Average consultation time
- Average dispensing time
- Percentage of drugs actually dispensed
- Percentage of drugs adequately labeled
- Patients knowledge of correct dosage

**Facility indicators**

- Availability of essential drugs list or formulary
- Availability of key drugs
APPENDIX 1 : LIST OF SPEAKERS- Chairs/Speakers/Moderators/Rapporteurs

Dr Darren ASHCROFT  
Director, Centre for Innovation in Practice  
School of Pharmacy and Pharmaceutical Sciences  
Manchester University  
Oxford Road  
UK-M13 9PT  
MANCHESTER  
United Kingdom

Dr Johnny BENEY  
Pharmacien-chef adjoint  
Institut Central des Hôpitaux Valaisans  
Member ESCP General Committee  
86 Av Grand Champsec  
CH-1951 SION

Dr Zinaida BEZVERHNI  
Assistant  
State Medical & Pharmaceutical University « Nicolae Testemitanu »  
Str. Testamitanu 22  
MD-2025 Chisinau  
Moldova

Ms Gudrun BUSCH  
Federal Office of Public Health  
Seilerstrasse 8  
CH-3003 Berne  
Switzerland

Dr Isabel CAIXEIRO  
President  
EUMO European Union of General Practitioners  
Av. Plasky 22  
BE-1030 BRUSSELS

Dr Afonso Miguel CAVACO  
Assistant Professor  
Department of social Pharmacy  
Faculty of Pharmacy  
University of Lisbon  
Av. Prof. Gama Pinto  
PT-1649-003 LISBOA

Prof Han de GIER  
Pharmacotherapy and Pharmacological Patient Care  
University Groningen  
The Netherlands

Ms Joanna GROVES  
Chief Executive Officer  
International Alliance of Patient Organizations (IAPO)  
703 The Chandlery  
50 Westminster Bridge Road  
GB-SE1 7QY LONDON

Mr Kees DE JONCHEERE  
Regional Adviser  
Health Technology and Pharmaceuticals  
WHO Regional Office for Europe  
Denmark

Dr Balázs HANKO  
Vice-President  
EuroPharm Forum  
Milnersvej 42  
HR-3400 HILLEROD

Dr Michael HARTMANN  
Apotheke des Universitätsklinikums, Jena  
Germany  
Erlanger Allee 101  
DE-07740 JENA

Dr Martin HENMAN  
Senior Lecturer  
School of Pharmacy  
Trinity College Dublin  
IE-2 DUBLIN  
Ireland

Prof Rob HORNE  
Head of the Department of Practice and Policy  
School of Pharmacy  
BMA_Tavistock House  
Tavistock Square  
GB-WC1H 9JP LONDON
Mr Nico KIJLSTRA  
Senior Inspector  
Dutch Health Care Inspectorate  
Ministry of Health, Welfare and Sport  
P.O. Box 392  
NL-8000 ZWOLLE

Ms Marjukka VALLIMIES-PATOMÄKI  
Ministerial Adviser  
Ministry of Health and Social Affairs  
P.O. Box 33  
FI-00023 HELSINKI  
Finland

Prof Christian LOVIS  
Head  
Unit Clinical Informatics  
University Hospitals of Geneva  
Rue Gabrielle Perret Gentil 4  
CH-1211 GENEVA 14  
Switzerland

Dr Sabine VOGLER  
Head of Pharma Team  
Gesundheit Österreich GmbH  
Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitszesen  
Stubenring 6  
AT-1010 WIEN

Prof Peter NOYCE  
Director of the Workforce Academy  
School of Pharmacy and Pharmaceutical Sciences  
Manchester University  
1st Floor, Stopford Building, Oxford Road  
GB-M 13 9PT MANCHESTER  
United Kingdom

Mr Max WELLAN  
Vice-President  
Austrian Chamber of Pharmacists  
Spitalgasse 31  
AT-1090 VIENNA  
Austria

Dr Keith RIDGE  
Chief Pharmaceutical Officer  
Department of Health  
80 London Road  
GB-SE1 6LH LONDON  
United Kingdom

Mr Peter WIENINGER  
Head of Department of Medicines  
Federation of Austrian Social Insurance Institutions  
Kundmanngasse 21  
AT-1031 WIEN  
Austria

Ms Christiane RITSCHEL  
Graduate Nurse  
Nursing Scientist  
Research Associate  
University of Applied Sciences  
Jena  
Carl eiss Promenade 2  
DE-07745 JENA

Dr Charlotte SALTER  
Lecturer Consultation Skills  
School of Medicine, Health Policy & Practice  
University of East Anglia  
Faculty of Health UEA  
GB- NR4 7TJ NORWICH  
United Kingdom
ORGANISING COMMITTEE

Project coordinators: Mr Nico KIJLSTRA, Dutch Health Care Inspectorate (Vice-Chairman Committee CD-P-PH), Dr Keith RIDGE (Committee CD-P-PH delegation, UK).

Ms Gudrun BUSCH (Committee CD-P-PH; Swiss delegation), Ms Damhnait GAUGHAN (Committee of Experts CD-P-PH/PC; Irish delegation), Ms Eva HOFBAUER (Committee CD-P-PH; Austrian delegation), Dr Christian KALCHER (Vice-Chair Committee of Experts CD-P-PH/PC, Austria), Ms Marita KINSELLA (Committee CD-P-PH; Irish delegation), Ms Cora NESTOR, Committee of Experts CD-P-PH/PC; Irish delegation)

Secretariat

Organising team

Responsible for the organisation of the Expert workshop:

Ms Sabine WALSER, Administrative Officer, Biological Standardisation, OMCL Network & HealthCare Department (DBO), European Directorate for the Quality of Medicines & HealthCare (EDQM)
Tel.: + 33 3 (0) 90 21 42 25; E-mail: sabine.walser@edqm.eu

Ms Angamah RAMEN, Assistant and CONTACT, Biological Standardisation, OMCL Network & HealthCare Department (DBO), European Directorate for the Quality of Medicines & HealthCare (EDQM)
Tel.: + 33 3 (0) 88 41 33 05; E-mail: angamah.ramen@edqm.eu
APPENDIX 2: SPEAKERS’ CURRICULA VITAE

Darren ASHCROFT, Phd

Darren Ashcroft is Reader in Medicines Usage and Safety and Director of the Centre for Innovation in Practice at the School of Pharmacy and Pharmaceutical Sciences, University of Manchester, England.

As a pharmacist and pharmaco-epidemiologist, his major research interests focus on the use of medicines within society. Topics of particular interest include: scientific, policy and social determinants of prescribing practices, efficacy and effectiveness of medications, compliance by patients with prescribed regimens, and methods to improve the appropriateness and safety of drug prescribing and drug taking.

Darren has secured a number of highly competitive research grants for both primary and secondary research in the fields of pharmacy practice, medicines usage and patient safety. In particular, he is a member of the European Union Framework 7 LINNEAUS EURO-PC collaboration which is bringing together researchers from a wide variety of disciplines, working at a pan-European level to raise the profile of multi-disciplinary research into the issue of patient safety in primary care.

He has authored numerous academic papers in the medical literature on medication use and its outcomes. Editorial work includes membership of the editorial boards of Current Drug Safety, Core Evidence and Expert Reviews of Pharmacoeconomics and Outcomes Research, as well as acting as Associate Editor for the Journal of Clinical Pharmacy and Therapeutics.

In 2009, he received the Pharmacy Practice Research Trust award at the British Pharmaceutical Conference for making “a significant contribution to the field of pharmacy practice research”.

Johnny C. BENEY

Johnny C Beney is a hospital pharmacist.

EDUCATION/TRAINING:
Université de Lausanne, Switzerland
Pharm. 1991
Pharmacy
Quality of Pharmaceutical services
Health Services Research

Université de Genève, Switzerland
Ph.D 1997

UCSF, Institute for Health Policy Studies, School of Medicine.
Post doctoral fellow 1999
Clinical Pharmacy Outcomes Research

UCSF, Institute for Health Policy Studies, School of Medicine.
Post doctoral fellow 1999

105
Positions and Honors.

Positions and Employment
1992 – 1993 Residency, Clinical Pharmacy, Institut Central des Hôpitaux Valaisans, Sion, Switzerland
1993 - 1997 Ph.D. thesis. Collaboration between the School of Pharmacy of the University of Geneva and the Business School of the University of Lausanne, Switzerland
1998 - 1999 Post-doctoral fellowship at UCSF (University of California, San Francisco), Department of Clinical Pharmacy, School of Pharmacy and Institute for Health Policy Studies, School of Medicine.
1999 - 2007 Hospital Pharmacist, Institut Central des Hôpitaux Valaisans, Sion, Switzerland
2008 - Deputy head of the Pharmacy Department, Institut Central des Hôpitaux Valaisans, Sion, Switzerland

Other Experience and Professional Memberships
1993 - Member of the Swiss Hospital Swiss Society of Public Health Administration and Hospital Pharmacists (www.gsasa.ch)
1994 - Member of the European Society of Clinical Pharmacy (www.escpweb.org)
1996 - Member of the American Society of Health System Pharmacy (www.ajhp.org)
2000 - Member of the resort Quality & Security of the GSASA
2005 - Quality auditor SGS (www.ch.sgs.com) for RQPH (an ISO compatible reference system specifically designed for hospital pharmacies endorsed by the GSASA)
2005 - Member of the general committee of the ESCP (www.escpweb.org)
2006 - Member of the American College of Clinical Pharmacy (www.accp.com)
2006 - Teaching (Bachelor & Master Pharmacy Degrees), Université de Genève, Switzerland (www.unige.ch/sciences/pharm)
2007 - Member of the organization committee of the 36th Symposium on Clinical Pharmacy, Istanbul, oct, 2007 (http://www.escpweb.org/istanbul/)

Honors
2007 - Best Poster Présentation, 14èmes Journées Franco-Suisses de Pharmacie Hospitalière, Lausanne, Switzerland
2008 - Best Poster Présentation, Congrès GSASA, Lucerne, Switzerland
Afonso Miguel CAVACO

Afonso Miguel CAVACO was born in March 1966 and has one son. He graduated from the University of Lisbon (Portugal) as a pharmacist in 1990, obtained a MSc in Community Pharmacy from the same University and a PhD in Pharmacy Practice and Policy from the University of London (UK) in 2006, under the supervision of Prof Ian Bates. In the last trimester of 2007, he was a post-doctoral Fulbright fellow at Johns Hopkins Bloomberg School of Public Health (USA), working with Prof Debra Roter. Afonso holds a position as Assistant Professor at the Faculty of Pharmacy, University of Lisbon. He is responsible for the undergraduate teaching unit Pharmacy Lab, as well as pharmacy students’ internship. He is also involved in post-graduate courses on communication skills for pharmacists and pharmacy management. His main research interest at the moment is patient-provider interaction/communication studies, using the Roter Interaction Analysis System (RIAS method), in particular for medical and pharmaceutical consultations.

Isabel CAIXEIRO, MD

Professional Experience:

Medical doctor (Faculdade de Ciências Médicas, Universidade Nova de Lisboa), 1978
General Practitioner since 1980
Specialist in General Practice / Family Medicine since 1994
Coordinator of the Health Unit for 6 years
Specialist in Occupational Medicine since 2000
Post-Graduation in Health Units Management (Universidade Católica de Lisboa) 2004

Associative Experience:
Member of South Region Board of the Portuguese Medical Association since 1999
Member of National Board of the Portuguese Medical Association since 2002
President of South Region Board since January 2005

International Experience:

Member of the Portuguese delegation to CPME since 1999
Vice president of the CPME - Preventive Medicine and Environment Subcommittee, 2004-2005
Member of the Portuguese Delegations to meetings: CEOM (Conférence Européenne des Ordres des Médecins), EFMA-WHO (European Forum of Medical Association-World Health Organisation), FEMS (European Federation of Salaried Doctors), IAMRA (International Association of Medical Regulatory Authorities), EANA (European Working Group of Practitioners and Specialists in Free Practice) and WMA (World Medical Association)
President of the UEMO – European Union of General Practitioners / Family Physicians 2007-2011

Johan (HAN) J. DE GIER

Johan J. De Gier received his Pharmacy B.Sc., M.Sc. and Ph.D. degrees (the latter in 1980 in the field of human psychopharmacology, in particular drugs and driving research) from the University of Utrecht in the Netherlands. He served at the University of Utrecht before he started his private company as scientific consultant in the field of pharmaceutical and medical informatics in 1984. He is consulting at PharmaPartners (a major supplier of information systems for community and hospital pharmacy and general practitioners’ practices) and at Health Base Foundation (an independent non-profit organization for maintaining a drug data base for health care providers and patients) for
developing patient-based R&D projects in integrated care. His major interest is developing integrated Pharmaceutical Care programmes for patients, community pharmacists and general practitioners. He has been appointed Professor of Pharmaceutical Care at the University of Groningen in the Netherlands since 2003.

He is Past-President of the Section of Pharmacy Information and a Member of the Programme Committee for organising the Annual Congresses within the International Pharmaceutical Federation (FIP).

Since 1975 he has been interested in the patient oriented application of knowledge on the behavioural toxicity of medicinal drugs. He is co-founder of the Institute for Drugs, Safety and Behaviour at Maastricht University in 1985 and served on the Institute's Board of Directors from 1993 - 1998. He is also Immediate-Past President of the International Council on Alcohol, Drugs and Traffic Safety and Workpackage Leader in the European DRUID-project (Driving Under the Influence of Alcohol, Drugs and Medicines). He is consultant specialized in issues concerning drugs and driving to the Dutch Ministry of Transport, Public Works and Water Management, and the Directorate General for Transport of the Commission of the European Communities. He has been the co-editor of two specialized publications known on drugs and driving (Drugs and Driving, Eds JF O'Hanlon and JJ de Gier, Taylor and Francis, London 1986 and Drugs, Driving and Traffic Safety, Eds JC Verster, Sr Pandi-Perumal, JG Ramaekers, JJ de Gier, Birkhauser, Basel 2009).

Joanna GROVES

Joanna Groves is the Chief Executive Officer of the International Alliance of Patients' Organizations (IAPO). IAPO is the global group representing patients from all disease areas and all regions of the world. IAPO's members are patients' organizations and non profit health-related organizations. Joanna is responsible for managing and implementing the overall strategy of the organization as defined by IAPO's international Governing Board. She takes a leading role in developing and communicating IAPO policy on healthcare issues, ensuring that it represents the views of IAPO's member patients' organizations, and building partnerships and working with other international health-related organizations. Driven by its membership, IAPO focuses on issues that are of importance to patients' organizations regardless of their disease area or geographical location. Ongoing policy priorities include access to healthcare, patient safety, patient information and patient involvement.

Joanna has a science policy background holding a Masters degree in Science and Technology Policy Studies. She joined IAPO in March 2004 as its Policy & External Affairs Director before becoming Chief Executive Officer in March 2007. Prior to joining IAPO, she has worked in other nonprofit health organizations including a policy and research capacity building role in The Welcome Trust's Biomedical Ethics Section. She has particular interest in how policy is formulated, supporting a stronger role for patient engagement and social and ethical considerations in health policy-making.

Balázs HANKO

Studies:

2001 - Pharmacy diploma at the Semmelweis University of Medicine Faculty of Pharmacy

2004 - Specialised exam of Pharmacy Administration

2005 - Ph.D. degree, summa cum laude qualification

Project: "The opportunities of pharmaceutical care in the case of type 2 diabetic patients in Hungary"
2008 - Medical Manager diploma

Scholarships:

2002 - Scholarship of the Hungarian Association of Private Pharmacists: one month in the U.S. in Memphis at the University of Tennessee Faculty of Pharmacy

Workplace:

2001 - Semmelweis University, University Pharmacy Department of Pharmacy Administration
2006 - Assistant professor
2007 - Vice head
2009 - Chief pharmacist of the University

Professional activities:

Drug provider activities:

- Since February 2004 I am the Secretary of the Drug Therapeutic Committee of the Semmelweis University, Budapest.

Educational activities:

- Since the school year of 2001/2002 I am participating in the education of Clinical Pharmacy and Pharmacy Administration subjects.
- Since the school year of 2003/2004 I am in the charge of Clinical Pharmacy/Pharmaceutical care subjects.
- Since 2005 I am participating in the education of Pharmacology of graduate nurses and maternity nurses at the Faculty of Medical Academy.
- Since 2005 I am participating in giving postgraduate lectures for pharmacists and physicians.

Research areas:

- Pharmaceutical care activities, implementation of pharmaceutical care
- Drug utilization
- Compliance, adherence

Functions, memberships:

2001 - Member of the Hungarian Chamber of Pharmacists, Hungarian Society of Pharmaceutical Sciences, Hungarian Private Pharmacists' Association
2005 - 2007 Professional secretary of the Diabetes Prevention Pharmacist Committee
2005 - Member of the Executive Committee of the Department of Pharmaceutical Care of the Hungarian Society for Pharmaceutical Sciences
2007 - Professional secretary of the National Committee on Pharmaceutical Care International
Michael HARTMANN, Ph.D, habil

**Professional Experience**

Since 1995  
Hospital of the Friedrich-Schiller-University, Jena  
Head of the Pharmacy Department

1992-1993  
Hospital of the Barmherzigen Brüder, Paderborn  
Senior Staff Member, Pharmacy Department  
Director: B. Backhaus

1991-1992  
Harvard Medical School, Mailman Research Center, Belmont, USA  
Research Fellow  
Director: Prof. Dr. R. Baldessarini  
Scholarship of the Deutsche Forschungsgemeinschaft

1988-1991  
Hospital of the Barmherzigen Brüder, Paderborn  
Staff Member, Pharmacy Department  
Director: B. Backhaus

1984-1988  
Philipps-University, Marburg  
Senior Staff Member, Department of Pharmaceutical Chemistry  
Director: Prof. Dr. W. Hanefeld

1983-1984  
Community Hospital, Bielefeld  
Resident, Pharmacy Department  
Director: Dr. H. Timm

**Education**

2000-2002  
Carl-Gustav-Carus University, Dresden  
Study of Public Health

2002-2004  
Berlin School of Economy, Berlin  
Study of Business Administration

2000 -  
Harvard School of Public Health, Harvard Center for Risk-Analysis, Boston  
Cost-Effectiveness Analysis for Medical Technologies and Pharmaceuticals

1979-1983  
Westphalian-Wilhelms-University, Münster  
Study of Pharmacy
Martin HENMAN, BPharm, MA, PhD, PG Cert (Health Econ), MPSI

Martin Henman is Senior Lecturer in the Practice of Pharmacy and Co-ordinator of the Centre for the Practice of Pharmacy in Trinity College Dublin. After completing his Pharmacy degree in the UK, he practised as a hospital pharmacist before undertaking a PhD in Pharmacology. He then started in University practice (1980) where he has remained ever since, becoming Co-ordinator of the Centre in 1997. He is a Member of the Pharmaceutical Society of Ireland and a founding tutor of the Irish Centre for Continuing Pharmaceutical Education. His main research interest is Pharmaceutical Care and he is a founder member of a research grouping, Pharmaceutical Care Network Europe. In September 2003 he became its Chairman. He was a member of the Pharmaceutical Care Task Force of the European Association of Faculties of Pharmacy that proposed the introduction Pharmaceutical Care in the undergraduate syllabus. In 2006 he was awarded a Provost’s Teaching Award for the excellence of his teaching in TCD. He is Medical Editor of ‘The Irish OTC Directory’, the Primary Care Guide to Non-Prescription Medicines and of the medicines information website ‘yourmedicines.ie’.
Rob HORNE

Rob Horne is a pharmacist with a PhD in Health Psychology. His career combines over ten years experience of clinical pharmacy practice and NHS management with a fifteen year programme of research into the psychology of medicines usage. In 2006, he joined the School of Pharmacy where he founded and continues to lead the Centre for Behavioural Medicine within the Department of Practice and Policy and in June 2008 he became Head of Department. The main focus of Professor Horne’s current research is the development of theory-based interventions to help facilitate informed choice and optimal adherence to medication in chronic illness. Other research interests include emotion and health and the placebo effect.

Kees DE JONCHEERE

Kees De Joncheere is currently responsible for the area of Health Technology and Pharmaceuticals in the WHO regional office for Europe, based in Copenhagen. He coordinates the WHO country assistance in the pharmaceutical sector for Central and Eastern Europe, as well as the countries of the former Soviet Union; and collaborates closely with western European countries and the European Commission on pharmaceutical policy issues, among others through the Pharmaceutical Pricing and Reimbursement Information project. He also co-authored the two recent WHO reviews of the Technology Appraisal programme and the Clinical Guidelines programme of the National Institute for Health and Clinical Excellence (NICE) in England.

He holds Master`s degrees in pharmacy and business administration from the Universities of Groningen and Amsterdam in the Netherlands, and from National University, San Diego, USA / San Jose, Cost Rica.

Previously he worked for 10 years with PAHO/WHO in Latin America (Central America, Brazil and the Mercosur countries) and before that on secondment of the Dutch government in the Middle East.

Among others, his particular interest is in public policy on medicines, especially on pharmaceutical pricing and reimbursement in Europe, as well approaches to improve the use of medicines. He is co-editor of the WHO publication Drugs and Money, 7th edition, 2002, and author of several articles and book chapters on pharmaceutical issues.

Nico KIJLSTRA

Nico Kijlstra studied pharmacy and public administration. He has working experience in public and hospital pharmacy and was part-time assessor of applications for marketing authorisations for the Medicines Evaluation Board. In 1996 he joined the Health Care Inspectorate, a public supervisory service and enforcement agency in the Netherlands. There he had several assignments, such as head of the section for pharmaceutical care (2002).

At present his main responsibilities are the co-ordination of supervisory activities regarding the use of medicines and the quality of pharmaceutical care, chairing the monthly meetings of the inspectors involved. He is responsible for several projects in the field of medication safety and performance measurement in healthcare, all related to the safe and effective use of medicines. He has been involved in the subject of medicines and Internet since 2002, e.g. as a member of the Ad hoc working group on mail-order of medicines of de Council of Europe. He regularly inspects e-pharmacies. Currently he is Vice-chair of the European Committee on Pharmaceuticals and Pharmaceutical Care, and Chair of the Committee of Experts on quality and safety standards in pharmaceutical practices and pharmaceutical care under the aegis of the European Directorate for the Quality of Medicines & HealthCare, Council of Europe, Strasbourg.
Christian LOVIS, MD MPH

Christian Lovis is professor of clinical informatics at the University of Geneva and leading the Clinical Information System (CIS) Unit at the Geneva University Hospitals. He is a medical doctor trained in Internal Medicine with special emphasis on emergency medicine. In parallel, he studied Medical Informatics at the University of Geneva focusing on clinical information systems. In 1998, developed a natural language entry system for the CPOE in the Veterans Affairs’s Vista computerized patient record in Seattle. In 2000, he graduated with a Master in Public Health from the University of Washington. He is the author of a large number of peer-reviewed papers and an editorial board member of major journals in medical informatics, such as the Journal of the American Medical Informatics Association, Methods of Information in Medicine and The International Journal of Medical Informatics. He is the president of the Swiss Medical Informatics Association; the secretary of the European Federation of Medical Informatics. He is chairing the Health Information System working group of the International Medical Informatics Association and the Traceability working group of the European Federation of Medical Informatics. He is co-chairing the “standard and architecture” working group of the Swiss e-Health federal coordination committee. He is member of several working groups at the European Union for ICT activities, such as impacts of health records, policies around secondary usage of clinical data, or regulation for the usage of RFID in healthcare. He is the clinical leader of the DebugIT Eu project of the 7th framework that intend to develop a distributed pan-European network around infectious disease surveillance using clinical information systems.

Peter NOYCE

Peter Noyce is Professor of Pharmacy Practice at the University of Manchester, England. From 1994-1998 he was Head of the School of Pharmacy and Pharmaceutical Sciences at Manchester, and from 2002-2005 Director, of the national Centre for Pharmacy Postgraduate Education.

His research activity lay in health services research applied to medicines and pharmacy, with a particular interest in community pharmacy. In 2004 he established The Workforce Academy at Manchester, a national observatory on pharmacy workforce and practice. Current research within The Academy includes a programme on quality and safety in community pharmacy, and another concerned with revalidation and “fitness to practise” of the pharmacy workforce.

In 2009, he was Practice Chair of the British Pharmaceutical Conference. He is also currently professional advisor to the Department of Health (DH) Group overseeing the establishment of the new professional regulatory body for pharmacy in the Great Britain: The General Pharmaceutical Council. From 2002-2005, Professor Noyce was a member of the UK Medicines Commission, the statutory advisory body on medicines policy and appellate body on medicines regulation.

In 2008, he was awarded a civil honour for services to healthcare: Commander of the Order of the British Empire (CBE)

Keith RIDGE

Keith Ridge, Chief Pharmaceutical Officer, is the professional lead for pharmacy both within the Department of Health and across Government. The post is a member of the senior management team of the Medicines, Pharmacy and Industry Group (MPIG). MPIG is part of the Medical Directorate of the Department of Health. The Chief Pharmaceutical Officer is a member of the NHS Medical Board – chaired by Sir Bruce Keogh, NHS Medical Director.
His current interests include providing clinical leadership to:

- the ongoing development and implementation of the pharmacy White Paper, *Pharmacy in England: Building on Strengths, Delivering the Future*, which sets out a clinical vision for pharmacy
- safe medicines use, including recently joining the Patient Safety Forum
- modernising pharmacy careers through the reform of pharmacy education and training and workforce planning
- the development and establishment of the General Pharmaceutical Council - a new professional regulator for pharmacy
- pharmacy aspects of preparing for pandemic influenza

He registered as a pharmacist in 1988 having trained at The School of Pharmacy, University of London. His PhD (University of Manchester) was informed by the evaluation of pharmacy automation technology. Keith has worked at most levels in NHS hospital pharmacy, his last two posts being Chief Pharmacist at North Glasgow University Hospitals and University Hospital Birmingham NHS Foundation Trust. Whilst in Glasgow, he was part of the National Pharmaceutical Forum, which advised the Chief Pharmaceutical Officer for Scotland. He was also a founder member of the Scottish Medicines Consortium. In Birmingham, Keith was working on a new patient centred model for pharmacy services before taking up current post on 1 March 2006. He has also worked in community pharmacy and the pharmaceutical industry, as well as an earlier spell at the Department of Health as professional lead on prescribing and hospital pharmacy.

Christiane RITSCHEL

Qualifications / Educations:

10/2002 – 02/2007 University of Applied Sciences Jena  
Nursing Science / Nursing Management  
Degree: Diploma

08/2005 – 12/2005 University of Missouri St. Louis  
Student exchange program

02/1988 – 06/1991 Professional School of Nursing  
Degree: Graduated Nurse

Professional Education and Qualifying for University admission

09/1973 – 07/1983 Primary and Secondary School

Career History:

05/2008 University of Applied Sciences Jena  
Nursing Scientist  
Research Associate  
Head of the advanced training program: Palliative Care
<table>
<thead>
<tr>
<th>Date</th>
<th>Institution and Position</th>
</tr>
</thead>
</table>
| 03/2006 – 04/2008 | University children’s hospital Jena  
Department of Pneumology and Cystic Fibrosis  
Study Nurse |
| 06/1991 – 02/2006 | University children’s hospital Jena  
Pediatric Intensive Care Unit  
Special Nurse of Pediatric Intensive Care |
| 07/1987 – 05/1991 | University children’s hospital Jena  
Attendant nurse |
| 09/1986 – 06/1987 | General hospital Greiz  
Attendant nurse |

Charlotte SALTER

Charlotte Salter is Lecturer in Consultation Skills in the School of Medicine, Health Policy and Practice at the University of East Anglia. A social scientist specialising in sociolinguistic analysis her current work focuses on dimensions of health professional-patient communication and on issues related to adherence & concordance in medicine use.

Career History

- Lecturer Consultation Skills, School of Medicine, Health Policy and Practice, University of East Anglia. May 2006 to present
- Senior Research Associate 2005 –2006
- Health & Social Care Planning Officer for Older People 2000 – 2001
- Freelance Researcher in Gerontology, Norfolk Social Services 2000
- Research Assistant, Department of Social & Public Policy and Social Work, University of Kent 1997 – 1998
- Consultancy Work 1993 – 1997
- Research Officer, Personal Social Services Research Unit, University of Kent 1990 – 1993
- Home Care Manager, Kent Social Services 1989 – 1990
- Research Co-ordinator, Geriatric Department, St. George’s Hospital Medical School London 1986 – 1988

Key Research Interests

- Doctor-patient & student doctor-patient communication
- Pharmacist-patient communication
- Compliance and concordance in healthcare interactions
- The patient’s perspective of medicine taking
- Qualitative research methods

Selected Published Articles

Salter, Charlotte ‘Compliance and concordance during domiciliary medication review involving pharmacists and older people’ Sociology of Health & Illness (in press)

Charlotte Salter, Richard Holland, Ian Harvey, and Karen Henwood “I haven’t even phoned my doctor yet.” The advice giving role of the pharmacist during consultations for medication review with patients aged 80 or more: qualitative discourse analysis BMJ, May 2007; 334: 1101; doi:10.1136/bmj.39171.577106.55

Grants Held
- UEA Alumni Fund 2007 - 2010

Sabine VOGLER

Sabine Vogler is a senior researcher in the field of health economics, in particular on the analysis of health care systems (Europe and beyond) with a focus on pharmaceuticals, i.e. pricing and reimbursement, rational use of medicines, distribution of pharmaceuticals. She has in-depth knowledge due to more than 10 years of research experience in these areas. She has been the project coordinator of various projects at national and at EU level (including PPRI, http://ppri.oebig.at and PHIS, http://phis.goeg.at). Furthermore she has been invited to various high level workshops and meetings as an expert in the field of pharmaceutical pricing and reimbursement. She has published several studies and is an appreciated speaker at conferences.

Max WELLAN

March 1994: Austrian Pharmacist’s Diploma

Professional life:

2008 - Expert member in WG of the Council of Europe EDQM “Pharmaceutical Care Working Party”
2007 - Vice-President of the Viennese Chamber of Pharmacists
2006 - 2007 President of the Viennese Chamber of Pharmacists
1997 - 2006: Vice-President of the Viennese Chamber of Pharmacists
2002 - Member of the Austrian Health Conference and various experts committees (eHealth initiative, Federal Committee for Ethical Questions, Federal Committee for the (advancement of the pharmacopoeia
2000 - Chair of the organisation committee of the FIP–Congress in Vienna
1999 - Expert member in WG of the Council of Europe “The role of pharmacists and the internet”
1999 - Member of the steering committee of the Austrian Chamber of Pharmacists
1998 - Head of organisation and examinant of “Aspirantenkurs”
(postgradual practical examination of pharmacist’s trainees) in
Vienna and Lower Austria
1998 - Charter member and 1st President of the “Forum Pharmacie”
1997 - Employed pharmacist in Vienna

**Peter WIENINGER**

**Education:**

**Membership of Professional Bodies:**

**International:**

- Representative of Austria in the Network of Competent Authorities of Pricing and Reimbursement of the
  European Union
- Representative of the European Social Insurance Platform (ESIP) in the “Working Group on Pricing”
  (Pharmaceutical Forum) of the European Comission
- Member (deputy) of the Transparency Committee of the European Union;
- Member of MEDEV-Committee
- Member of Piperska-Group on Rational Use of Medicines
- Member of Vancouver Group
- National (examples):
  - Member (Deputy) of Austrian Taxkommission (Committee on Pharmacies)
  - Member (Deputy) of Austrian Taxausschuss
  - Member (Deputy) of Austrian Abgrenzungskommission (Committee on Distribution of Medicines)
  - Member of Austrian Ausschuss für rationale Verschreibung (Committee on rational Use of Medicines)

**Professional experience:**

**1991-1992**

Vienna

Austrian Ministry for Labour and Social Affairs

**Position**

Evaluation of companies for business support

**1994-2000**

Vienna

Main Association of Austrian Social Insurance Institutions, Head (Deputy) of Health Economic Department

Development of Health Economic Instruments for Social Insurance Institutions
APPENDIX 3: LIST OF PARTICIPANTS

Professor Marja AIRAKSINEN
University of Helsinki
P.O. Box 56
FI-00014 Helsinki
Finland

Mr Jorunn AUSTAD
Adviser
Norwegian Directorate for Health
Universitetsgaten 2
NO-0130 Oslo
Norway

Mr Zaza CHAPICHADZE
Deputy Head of the Pharmaceutical Department
Ministry of Labour, Health and Social Affairs of Georgia
144, Ak. Tseretelli ave.
GE-0119 Tbilisii
Georgia

Mr Wojciech GIERMAZIAK
Vice Director
Drug Policy and Pharmacy Department
Ul. Miodowa 15
PL-00952 Warsaw
Poland

Ms Agnes GOMBOS
Senior Adviser
Norwegian Pharmacy Association
P.B. 5070 Majorstuen
NO-0301 Oslo
Norway

Ms Olga GRINTSOVA
Postgraduate Student
Department for Clinical Pharmacology & Pharmaceutical Care
National University of Pharmacy
Pushkinskaya Str. 53
YA-61204 Kharkiv
Ukraine

Dr Attila HARVAT-SZIKLAI
Secretary
Hungarian National Committee of Pharmaceutical Care
Dozsa Gy. Ut 86 b
HU-1068 BUDAPEST
Hungary

Mrs Eva HOFBAUER
Federal Ministry of Health
Radetzkystrasse 2
AT-1031 Vienna
Austria

Dr Christian KALCHER
Federal Ministry of Health
Radetzkystrasse 2
AT-1031 Vienna
Austria

Ms Marita KINSELLA
Department of Health and Children
Hawkin House
Hawkins Street
IE-2 Dublin
Ireland

Mrs Diane LEAKEY
Head of Communications and Information
Medicines and Healthcare Products
Regulatory Agency
Market Towers
L Nine Elms Lane
Vauxhall
GB-SW8 5NQ London
United Kingdom

Mrs Colette MCCREEDY
Self Medication Specialist
Medicines and Healthcare Regulation Agency
Market Towers
1 Nine Elms Lane
Vauxhall
GB-SW8 8LH Cheshire
United Kingdom
Dr David MILLSON
Royal College General Practitioner
17 Buckingham Drive
Knutsford
GB-WA16 8LH Cheshire
United Kingdom

Mr J. Paulo MOREIRA
Deputy Head of the Health Communication Unit
European Centre for Disease Prevention and Control (ECDC)
Tomtenkadavagen HA
SE-171 83 Stockholm
Sweden

Dr Cora NESTOR
Inspector
Pharmaceutical Society of Ireland
Irish Medicines Board
18 Shrewsbury Road
 Ballsbridge
IE-4 Dublin
Ireland

Professor Lidija PETRUSEVSKA-TOZI
President
Pharmaceutical Chamber of Macedonia
Kostandin Kirkov 5 1a
MK-Skopje
Former Yugoslav Republic of Macedonia

Ms Beata RATAJczyk-BIENERT
Chief Executive
Drug Policy and Pharmacy Department
Ministry of Health
Ul. Miodowa 15
PL-00952 Warsaw
Poland

Mr Jan SAEVELS
Associate Director
APB, Associate Director
Centre for Scientific Development
For Pharmacists (CWOA-CDSP)
Archimede 11
BE-1000 Brussels
Belgium

Mr Albert SAHAKYAN
Deputy Director
Assistant of Professor
Yerevan State Medical University Center of Drug & Med Technology Expertise
N1 15 Moskovyan Street
AM-0001 Yerevan
Armenia

Dr Manuela SANTOS MARTIN
Treasurer
UEMO
Av. Plaskt 22
BE-1030 Brussels
Belgium

Dr Carolien SINO
Graduate Nurse
University of applied science
PO Box 85182
NL-3508 Utrecht
The Netherlands

Dr Afrim TABAKU
Head of environmental epidemiology unit
Public Health Institute
Aleksander Moisi Street 80
AL-Tirana
Albania

Ms Maria TERPLAN-BALOGH
Scientific Adviser
National Institute of Pharmacy
P.B. 450
HU-1372 Hungary

Dr Maria TERRACCIANO
Chemist Office
Ministry of Health
Vuz G. Ribotta 5
IT-00144 Roma
Italy

Mrs Kristrun THORKELSDOTTIR
Quality Manager
The Icelandic Nurses Association
Tunfıt 5
IS-210 Gardabaer
Iceland
Dr Mark TIMONEY  
Senior Principal Pharmaceutical Officer  
DHSSPSNI  
Stormont  
GB-BT 180HB Belfast  
United Kingdom

Ms Anna Karin UTTERSTROEM  
Manager Services and Development  
Apoteket AB  
Sadermalmsallen 36  
SE-11881 Stockholm  
Sweden

Ms Marjukka VALLIMIES-PATOMÄKI  
Ministry of Social Affairs and Health  
P.O. Box 33  
FI-00023 Helsinki  
Finland

Ms Kristine VRUBLEVSKA  
Board member  
Pharmacists’ Society of Latvia  
Skolas 3  
LV-1010 RIGA  
Latvia

Mr Max WELLAN  
Vice President  
Austrian Chamber of Pharmacists  
Pharmacists Society of Latvia  
Skolas 3  
LV-1010 Riga  
Latvia

Dr Tommy WESTERLUND  
Research & Development Pharmacist  
Medical Products Agency  
SHIP, Att. Läkemedelsverket  
Rönnowsg. 8  
SE-252 25 Helsingborg  
Sweden

Mr Peter WIENINGER  
Main Association of Austrian  
Federation of Austrian Social Insurance Institutions  
Kundmannngasse 21  
AT-1031 Wien  
Austria