WORKING SYMPOSIUM OF THE
PHARMACEUTICAL CARE NETWORK EUROPE (PCNE)
14-15 MARCH 2014

MEDICATION REVIEW SYMPOSIUM

Chairs:

Nina Griese & Saija Leikola

History

- In 2009 the Pharmaceutical Care Network Europe (PCNE) started to discuss a definition and terminology for medication reviews (MR) performed by pharmacists in ambulatory and clinical setting.
- At different meetings and workshops the PCNE definition and terminology of MR was further developed.

Evolution of the definition

A MR is an evaluation of patient‘s medicines with the aim of optimizing the outcome of medicine therapy by detecting, solving and preventing DRP.

2009
Geneva

MR is an evaluation of patient‘s medicines with the aim of managing the risk and optimizing the outcome of medicine therapy by detecting, solving and preventing DRP.

2011
Manchester

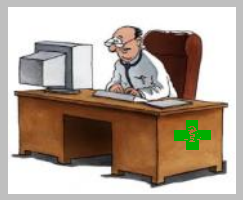
MR is an evaluation of a patient‘s medicines with the aim of optimizing the outcomes of medicine therapy. This entails identifying the risks, detecting MRP and suggesting solutions. MR should be part of the management of medication therapy.

2011
Dublin

General conditions 2011 (Dublin)

- The definition should be a comprehensive one, covering different types of a medication review by pharmacists
  - Different information sources (MUR UK, HMR Australia)
  - Different settings (hospital, nursing home, community pharmacy)
- The definition should clarify it's relation to medication managment (MM); and vice versa (MM includes a systematic follow-up/a continuity of care)
  - to allow a clear allocation of services
- The definition should focus on the process of the evaluation until the step "agreement on interventions"

Types of Medication Review (PCNE)

	Medication history 	Patient/Carer interview 	Clinical data 
1 – Simple medication review	**Yes**	No	No
2a – Intermediate medication review	**Yes**	**Yes**	No
2b - Intermediate medication review	**Yes**	No	**Yes**
3 – Advanced medication review	**Yes**	**Yes**	**Yes**

Aims of today

- *To finalize the medication review definition for a PCNE statement*
- *To complete a list of DRP that can be detected with the different types of medication review*
- *To decide on next steps of PCNE with regard to medication review*
- *To share experiences gained from research projects with regard to medication review*

Programme

- PCNE definition of medication review and the achievements of the Berlin working conference (*Dr. Saija Leikola, Finnland)*
- Exploratory study of pharmacist-led home medication use reviews (HMUR) for elderly people in collaboration with family doctors and home care nurses (P*rof. Olivier Bugnon, Switzerland)*
- Implementation and evaluation of a new multidisciplinary guideline on polypharmacy in the Netherlands (*Menno van Woerkom, Netherlands)*
- GeriMed, a medication review programme for nursing homes (*Manfred Krüger, Germany)*
- Medication review - focus inappropriate medications - for the elderly patients in an intermediate care unit in primary care (*Dr. Kirsten Viktil Norway)*

WS1.
PCNE milestones for medication review

- *For PCNE members and participants who intend to become a member*
- *Participants will discuss what they as a member expect from PCNE with regard to medication review and its further development*

  Aim: to decide on next steps of PCNE with regard to medication review
- *Facilitator: Martin Henman*

Results WS1: PCNE Tasks & Milestones

- Support Tools
  - Definitions, Clarifications, Explanations
- Framework for Guidelines and Standards
- Surveys Mapping
- Quality Measures for MR
- Collaborative Projects within PCNE
- Projects about Collaboration & Communication
- Systematic Review & Meta Analysis

WS2. Finalizing the PCNE definition of medication review

- *For participants who have been already involved in PCNE medication review workshops and discussions.*
- *The participants will discuss the PCNE definition of medication review*
- *Aim: to finalize the definition for a PCNE statement*
- *Facilitators: Nina Griese and Kurt Hersberger*

Result WS2: PCNE definition of Medication Review (Malta 2014)

Medication review is an evaluation of all the patient‘s medicines with the aim *of optimizing medicines use and improving health outcomes*. This entails detecting drug-related problems and recommending interventions.

Comments:

- «all» medicines includes prescribed and OTC and, if accessible the history
- «Medicines Use», according to the PCNE definition of PhC 2013, which refers to the WHO definition of «responsible use of medicines». This covers effectiveness, quality of life, efficiency and safety. (1)
- Medication review is part of the patient`s medication management.
- PCNE should define the term medication management.

(1) www.who.int/medicines/publications/responsible_use/en/index.html

Further Comments

Comments expressed during the workshop as explanation for the final version

- Patients instead of individuals: Because drugs are involved
- «medicines» covers all including devices, packaging etc.
- «identifying the risks» excluded from definition because already covered by the PCNE definition of DRP
- «drug related problems» instead of medication related problems according to the PCNE definition of DRP
- «medicines use» includes prescribing
- «Suggesting» replaced by «recommending» reflects more engagement and responsibility

The plenary additionally commented and discussed on:

- Omission of the term risk
- Effectiveness and Patient safety not mentioned?

WS3. DRP and medication review: Which DRP can be detected with type 1 and 2a

- *For beginners and for experienced researchers*
- *On the basis of the results of the PCNE workshop in Berlin and the PCNE-DRP classification the participants will complete a list of DRP that can be detected with these levels*
- *Facilitator: Saija Leikola*

Medication review Type 1

STANDARD (ALWAYS)	SOMETIMES (PARTLY)
P3.1. Cost (just the price of product)	P1.2. non-optimal effect (dispensing times)
	P1.4. Untreated indication (methotrexate without folic acid, NSAID without PPI)
	P2.1. Adverse effect (e.g.,opioid + constipation medicine – risk because of age/drug-drug interaction)
	P2.3. Toxic ADE (e.g., methotrexate every day with large dose)
	P3.2. Unnecessary drugs (e.g., duplication)
	(Because of DDI also 1.1. No effect in addition to P2.1. risk for ADE)
	Based on gender also e.g., unnecessary drug

Medication review Type 2a

STANDARD (ALWAYS)	SOMETIMES (PARTLY)
P3.1. Cost (price of product + patient opinion)	P1.1. No effect (dispensing times) P 1.2. non-optimal effect (e.g., pain) P1.3. wrong effect (e.g., benzodiazepine + aggression) (1.4. untreated indication)
4.1. patient dissatisfied (despite of optimal therapeutic and economical results)	P2.1. ADR (not all, e.g., risks of DDIs yes, liver enzymes no) P2.2. ADR allergic P2.3. ADR toxic
	P3.2. Unnecessary drugs (e.g., duplication)

Additional points regarding the classification

- P1.3. Wrong effect – what does that mean? Can you have this or are that kind of effects ADRs? (ADR needs to be harmful?)
- P4.1. Why just not “Patient dissatisfied”? You can not always know if the treatment outcomes are optimal even if you know that the patient is dissatisfied

WS4. DRP and medication review: Which DRP can be detected with type 2b and 3

- *Facilitators: Markus Messerli and Lea Botermann*
- *For beginners and for experienced researchers*
- *On the basis of the results of the PCNE workshop in Berlin and the PCNE-DRP classification the participants discussed DRP that can be detected with these levels*

WS4. DRP and medication review: Which DRP can be detected with type 2b and 3

- *Participants of the WS first agreed with the different settings, in which a pharmacist might be involved and could provide medication reviews type 2b (and 3):* ***community pharmacy, nursing home, hospital, rehabilitation, and assisted living****.*
- *Discussion in smaller groups then focused on the* ***available information and characteristics of each setting****. As a result of these findings, detectable DRPs and causes for such were mapped.*
- *As a main conclusion all groups stated, that pharmacists are able to detect various drug related issues with medication reviews type 2b. When ever the patient is involved (type 3), specific individual care might be provided.*
- ***No unambiguously pattern for DRPs could be found - each setting provided special conditions for different DRPs,*** *showing the wide variety of pharmaceutical care skills that are needed to establish safe medication use in all settings.*

Medication review Type 2b

Problems and Causes (codes) discussed by participants to be found with type 2b:

Problems	Causes
P 1.1-1.3 potentially no/suboptimal/wrong effect of drug treatment –> (due to C 1+3+4)	C 1 Drug selection (DDI; Contraindication)
P 1.4 Untreated Indication	C 3 Dose selection (dose too high/low; wrong dosage regimen; dose adjustment necessary)
P 2 potentiall adverse reactions (due to C 1+3+4)	C 4 treatment duration
P 3.1 Treatment costs P 3.2 unnecessary drug-treatment (drug for no indication)	C 6 Logistics

Medication review Type 3

Problems and causes (codes) discussed by participants to be found with type 3 (additionally to the ones found with type 2b):

Problems	Causes
P 1.1-1.3 manifest no/suboptimal/wrong effect of drug treatment –> (due to C 1+3+4)	C 2 (inappropriate) drug form
P 2 manifest adverse reactions (due to C 1+3+4)	C 5 drug use process (by the patient)
P 4.1 Patient dissatisfied	C 7 patient