

PCNE 2013 Working Conference

Workshop 1

Medication Review

Day 3

Berlin, 6-8 February 2013
Chairs: Saija Leikola, Helsinki
Foppe van Mil, The Netherlands



What we did....

- Day 1: Focus on the 4 PCNE types of medication review
- Day 2: Focus on methodologies and workflow



Clinical patient data

Untreated conditions

Validity of indications

Response to therapy

Drug doses against indication

Contraindications

Kidney function

Adverse drug reactions

Care guidelines and recommendations

Reimbursements

Patient interview

Ability to use as instructed

Drug-related concerns (costs)

Adverse drug reactions
Some aspects of effectiveness (e.g., pain)

Prescriptions

Drug-drug interactions, duplication

Inappropriate drugs (e.g., Beers criteria²⁰)

Sedative, serotonergic, anticholinergic load

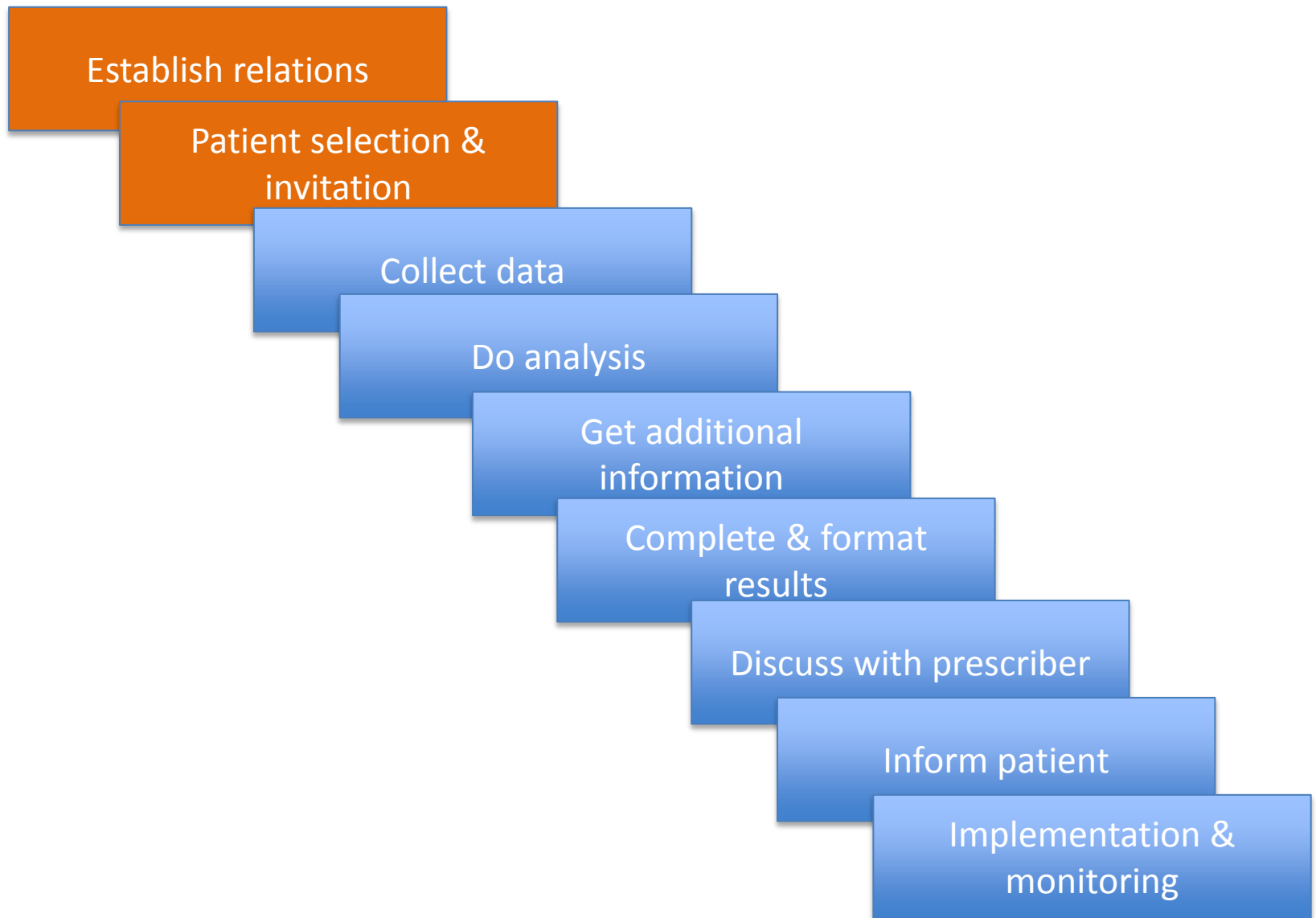
Dose, dosing time, - interval

Drug costs

Prescription review: at hospital admission, in nursing homes

Concordance and compliance review: at community pharmacies, at hospital discharge

Clinical medication review: CMR



	Type 1	Type 2A	Type 2B	Type 3
Establish relations & inform				
Patient selection & invitation	Only selection	Invitation, how? Letter-Telephone		
Data collection	Pharmacy (Drug list)	Pharmacy & Patient	Pharmacy & Physician	Pharmacy, physician & patient
The review	Explicit + DDI	Match indication-drug + explicit & implicit & DDI's		
Seek additional info	N.a.	Approach patient	Approach physician and/or patient	
Complete & format results	For whom? Problem-Solution-Evidence Document			
Discuss with prescriber	What is important? Who does what?			
Discuss with patient	Only if necessary? Also say if no intervention?			
Etc.				

MR for all patients?

- Type 3 review costs 1 ½-2 hours, you can do 4 per working day = 20/week = 1000/year. Most pharmacies have more patients. Most pharmacists also have other tasks.....
- Conclusion: Selection of individuals most at risk for PIMs/DRPs is necessary.



Patient inclusion criteria (1)

- Patients older than 60-65 years and/or
- Taking 5 or more regular medications¹ or
- Taking more than 12 doses of medication per day¹ or
- Medication regimen changed four or more times in the last 12 months¹ or
- More than three different (chronic) illnesses¹ or
- History of noncompliance¹ or
- Use of drugs that require therapeutic drug monitoring¹ or



¹Koecheler JA, et al.. *Am J Hosp Pharm.* 1989;46:729-732.

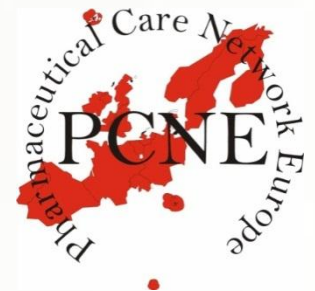
Patient inclusion criteria (2)

- Symptoms suggestive of an adverse drug reaction or
- Sub-therapeutic response to treatment with medicines or
- Medication from more than one prescriber or
- At least one chronic disease or one specific chronic disease or
- Total monthly cost of medication exceeds ? or
- Patients classified in need of care (AUS)



Again.... For almost all patients

- So -> Which patients are most at risk for Drug Related Problems (DRPs) or Potentially Inappropriate Medications (PIMs)?
- Carole Kaufmann, Switzerland



Ephor Filter method (NL 2009)

- Method for performing medication review with 6 essential filters, to be adapted to culture/country
- First filter is scoring method for patient selection.



Filter 0: patient

- Scoring based on age, number and type of drugs, drugs with small therapeutic margins and kidney function
- Age, number of drugs and kidney function are most important criteria for a method of risk assessment for PIPs, according to literature

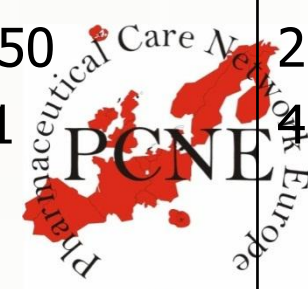


Filter 0: Triage

12

Age	<65	0
	66-75	1
	76-85	2
	>85	3
No of drugs	<6	0
	6-9	2
	>9	4
No drugs small ther. Index Max 3 points	Acenocoumarol	1
	Anti-epileptics	1
	Digoxin	1
	Lithium	1
	Methotrexate etc.	1

Drug groups Max 6 points * = chronic	Cardiovascular	1
	Antidiabetics	1
	Anticoagulation	1
	Neurology/Psych*	1
	Astma/COPD	1
	NSAIDs	1
Kidney function	Opioids	1
	Corticosteroids	1
	GFR >50	0
	GFR 31-50	2
	GFR <31	4



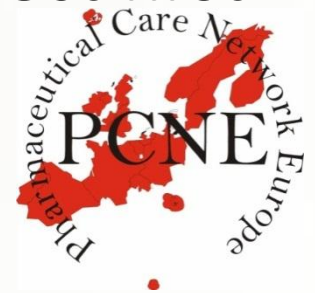
Ethical dilemma's (5 min./case)

- Very old homebound people vs patient with still a full life before them
- 'Defenceless patients' in homes vs independently living elderly
- Many 'quick and dirty' reviews vs a few very thoroughly
- No review if physician does not want to cooperate?
- No review if review is not being paid/remunerated (if applicable)?
- No review if the patient does not want to /cannot pay (if applicable)?



Small group discussions (30 min.)

- You are the owner of three pharmacies in a small town with 3 GPs. In each pharmacy, you have a pharmacist, and 3 technicians as staff. The GPs ask you to start a Medication review service, for their patients and will cooperate in contributing the clinical data & diagnoses. The GPs find it irrelevant if the patient wants the review, they think all their patients need it.
- Discuss: (1) Which patients would you select first (and why) and (2) How would you do this selection in a pharmacy in your country.



Competence (45 minutes)

- Three groups
 - Define necessary skills for MR
 - Define necessary knowledge for MR
 - Are the needed skills and knowledge the same for the 4 types of MedRev
 - Discuss if you think an accreditation is necessary and why
 - Exchange the situation in your country regarding competence



Presentations & discussions

- Each participant gets 5 minutes to present their own MR project(s), with emphasis on the most remarkable features
- Timekeeper
- 10 Minutes preparation time.

