Workshop 6

*Let’s do it. Developing a joint, international, PCNE project*

**Participants:** Ana Janežič, Slovenia; Ana Maria Dago Martínez, Spain; Ana Molinero, Spain; Elisabeth Pfister, Germany; Igor Locatelli, Slovenia; Maissun Al-Kaddah, Germany; Markus Messerli, Switzerland; Olaf Rose, Germany; Yunn-Fang Ho, Taiwan;

**Facilitators:** Filipa Alves da Costa, Portugal; Lea Knez, Slovenia
Day 1, session 1

• Aim of this workshop is...
  to outline a study/project in a given research area;

• The ultimate goal is..
  to draft a grant application for Horizon 2020, including a minimum of 3 partners

• During this session, we intend...
  to define a good research question
What is Horizon 2020?

- Discover
- Develop
- Deliver

80 B €
2014-2020
General reflections on the idea

Of course, it should be...

...something that strongly interests PCNE
...something that is important and relevant for the society
...something that is new and creative.

But should also provide...

...new data, generally unnoticed by other healthcare professionals
...promises of improved outcomes by optimisation of drug therapy
...tangible benefits for patients.
General reflections on the consortium

PCNE offers a great network of pharmaceutical care researchers across various countries and sites, offering the possibility to...

...exploit the infinity of expertise
...rapid collection of large number of data
...but also challenges how to appropriately address the large variability of practices across different sites

We are great on our own, but together it is more fun...
...take advantage of PCNE liaisons with other organisations
...consider patient organisations as partners
General reflections on the proposal

To be practical and deliverable should tackle the challenges of a joint, international project:

• Keep the impact of the diversity among practices to a minimum
• Keep adherence to the study protocol high
• Keep the data collection burden to a reasonable level
• Keep the outcomes maturable during the study time frame
• Keep dependency from other professions to a minimum
• Keep the motivation of participating sites, pharmacists and patients high
• Keep in mind also budget uncertainties
Responses from the survey: general topics

- Medication Review: 5
- Medication Adherence: 3
- Medication Reconciliation: 2
- Swallowing difficulties of medication: 1
- Screening: 1
- Disease Prevention: 1
Medication review

• Definition:

Medication review is a structured evaluation of a patient’s medicines with the aim of optimising medicines use and improving health outcomes. This entails detecting drug related problems and recommending interventions.

PCNE, 2016

• Why choosing this topic?

Participants were asked to defend their ideas.
Medication adherence

• Definition:

Adherence to medication is the process by which patients take their medications as prescribed.


• Why choosing this topic?

Participants were asked to defend their ideas.
Medication reconciliation

• Definition:

Medication reconciliation is the process of creating the most accurate list possible of all medications a patient is taking - including drug name, dosage, frequency, and route – and comparing that list against the physician’s admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points.

Institute of Healthcare Improvement, 2011

• Why choosing this topic?
Prioritise between the top 3 topics

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<th>Topic</th>
<th>1st (3 points)</th>
<th>2nd (2 points)</th>
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After a Nominal Group technique, the top rated topics were Medication review and Medication Adherence.

Two groups worked on Medication Review and one group on Medication Adherence.
Additional information from the survey held prior to the conference: Topics related to a specific drug, disease or patient group

<table>
<thead>
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<th>Topic</th>
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<tr>
<td>Oncologic drugs</td>
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<td>Cardiovascular Disease</td>
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<td>Anticoagulants</td>
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<td>Potentially inappropriate medicines</td>
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<td>Self-medication</td>
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<td>Paediatrics</td>
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<td>Elderly</td>
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<tr>
<td>Biologics</td>
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</table>
Day 1, session 2: Let the competition start!

• Proposed research topic

• Proposed research questions

• Provide also arguments for
  Why is the proposed research topic important for PCNE?
  Why is the proposed research topic important for society?
  What advances will it provide beyond the current state of art?
  What benefits will it provide for the patients?
**W6: Let’s do it.** Developing a joint, international, PCNE project

Day 2, session 2: External evaluation for the best research question

**Key message:** emphasise that the intervention tackles an *important unmet need for the patient* rather than the intervention being offered by a pharmacist.
Day 2, session 2: Starting the real research project

Refine research question:
Objectives:
• Study design
• Length of study
• Setting
• Patient selection
• Study design
• Defining the intervention
• Defining outcomes
• Tools for data collection
• Statistical analysis

Day 3: The Projects

….
Project 1
Research team: Ana Janežič, Slovenia; Elisabeth Pfister, Germany; Maissun Al-Kaddah, Germany; Markus Messerli, Switzerland

Pill coach

Does tailoring an intervention lead to improved health outcomes compared to usual care in patients with oral antitumor therapy detected as non-adherent?
The idea...

**Action taken**
- Scan for non-adherence
  - ... various health care provider

**Performed by...**
- Tailoring and defining the intervention
  - ... the pillCoach and the patient
- Performing the intervention
  - ... various health care provider

**Output of the project**
- Scanning algorithm to detect non-adherence, tailoring process to match an intervention with an individual patient’s profile, coaching program for primary care
Tailored interventions to improve medication adherence in young adults with type-2 diabetes in primary care

Project 2
Research team: Ana Maria Dago Martínez, Spain; Ana Molinero, Spain; Igor Locatelli, Slovenia; Olaf Rose, Germany; Yunn-Fang Ho, Taiwan;

Objectives:
To determine the reason why patients do not take their medicines
To develop and validate a pre-screening tool for non-adherent patients
To develop and validate tools to tailor adherence interventions
To assess the outcomes of tailoring interventions to enhance adherence
Methodos

1. Patients

Inclusion criteria:

• younger patients with diabetes type 2 (18-50 years);
• taking antidiabetic drugs

Exclusion criteria:

• patients treated only with diet
• patients with HbA1c controlled at the moment of recruitment
• intellectual disabilities,
• language barriers
2. **Possible outcomes:**

- proportion of days covered/medication possession ratio, knowledge about illness and drugs,
- disease outcome: HbA1c, LDL, blood pressure,
- total number of drugs (total and antidiabetics),
- treatment outcome: ADE (hypoglycemic events reported by patients),
- major cardiovascular events, microcardiovascular events
- hospital admission, ER visit, GP contacts
3. Design:

• prospective cluster randomised stepped-wedged design
• intervention time min. 12 months, additional follow-up of 3 months
• prescreening questionnaire by pharmacist
• in eligible patients: screening of adherence during patient interview using another questionnaire
• cluster randomisation by biometrician

  tailored intervention based on non-adherence type based on WHO classification: health system, condition, patient, therapy, socioeconomics; based on a medication review type 2A
• intervention: tailored to the type of nonadherence reasons
• assessing outcomes every 3 months