

14th PCNE working conference

5th – 8th February 2025





Workshop



Interventions to enhance medication adherence in community pharmacy – How to develop efficient strategies with self-report questionnaires such as the 15-STARs?

14th PCNE working conference, Feb 5-8, 2025
Innsbruck

PD Dr Isabelle Arnet & BSc Kirstin Messner
Pharmaceutical Sciences, University of Basel
Switzerland



Arnet / Eickhoff / Seidling

Dr Christiane Eickhoff
ABDA, Berlin
Germany

PCNE 2025

Prof Dr Hanna Seidling & Gabriel Redicker
University Hospital
Heidelberg, Germany

Agenda and Schedule - Overview

Wednesday 05/02 14:30-16:30	2h	Welcome, Setting the scene Background information	inputs	
Thursday 06/02 10:00-12:00	2h	m-health, adherence apps	inputs from Kirstin & Gabriel group discussion	
13:00-15:00	2h	Counselling on adherence apps	group work	
Friday 7/02 10:00-12:00	2h	Selecting patient, profiling	group work	
13:00-16:00	3h	Recruiting patient, delivering intervention	inputs from Kirstin role play	
Saturday 8/02 10:00-11:00	1h	Generating a flow-chart	group work	



- 13 countries
- 3 moderators
- 2 co-moderator PhD

- 7 PhDs
- 2 comm pharmacists
- 3 prof
- 1 director

15-STARS: Screening tool for non-adherence

- Aim of screening for:
 - *extent* of missed doses
→ **identify patients** with difficulties
 - *identify reasons* (modifiable and unmodifiable)
→ **enable to define targeted interventions**

Please select whether you agree (yes) or disagree (no) with the following statements.

	yes	no
1. I am able to recognise all the medicines I use (by their shapes, their colours, their sizes, etc.).	<input type="checkbox"/>	<input type="checkbox"/>
2. I have difficulties getting my medicines ready before I take them (e.g., popping them out of a blister pack).	<input type="checkbox"/>	<input type="checkbox"/>
3. I understand the instructions for all the medicines I use.	<input type="checkbox"/>	<input type="checkbox"/>
4. I have problems with the use of at least one of my medicines (e.g., swallowing pills, using the inhaler device, counting drops, injection).	<input type="checkbox"/>	<input type="checkbox"/>
5. I manage to get refills for all my medicines before I run out of them.	<input type="checkbox"/>	<input type="checkbox"/>

challenging and many people do not always take their medicines as prescribed, please go to question 12. If you have any difficulties taking your medicines as prescribed, please tell us why:

	yes	no
1. I have difficulties getting my medicines ready before I take them (e.g., popping them out of a blister pack).	<input type="checkbox"/>	<input type="checkbox"/>
2. I understand the instructions for all the medicines I use.	<input type="checkbox"/>	<input type="checkbox"/>
3. I have problems with the use of at least one of my medicines (e.g., swallowing pills, using the inhaler device, counting drops, injection).	<input type="checkbox"/>	<input type="checkbox"/>
4. I manage to get refills for all my medicines before I run out of them.	<input type="checkbox"/>	<input type="checkbox"/>

address this topic.

	yes	no
1. I am able to recognise all the medicines I use (by their shapes, their colours, their sizes, etc.).	<input type="checkbox"/>	<input type="checkbox"/>

feeling well?

	yes	no
1. I am able to recognise all the medicines I use (by their shapes, their colours, their sizes, etc.).	<input type="checkbox"/>	<input type="checkbox"/>

taking any of your medicines?

	every day	I do not know
1. I am able to recognise all the medicines I use (by their shapes, their colours, their sizes, etc.).	<input type="checkbox"/>	<input type="checkbox"/>

g any of your medicines without informing your pharmacist?

	yes	no
1. I am able to recognise all the medicines I use (by their shapes, their colours, their sizes, etc.).	<input type="checkbox"/>	<input type="checkbox"/>

15-STARS - Translated versions (*January 2025*)

No	Target language	Country	Coordinator
1	Albanian	Kosovo	Kreshnik Hoti
2	Arabic	Jordania	Mohanad Odeh
3	Bulgarian	Bulgaria	Maria Kamusheva
4	Croatian	Croatia	Iva Mucalo
5	Danish	Denmark	Rikke Nørgaard Hansen
6	Dutch	The Netherlands	Rik Ensing
7	English <i>validation study</i>	Ireland	Laura Sahm
8	French <i>validation study</i>	Switzerland	Isabelle Arnet & Claude Hostert-Pfeiffer
9a	CH-German <i>validation study</i>	Switzerland	Isabelle Arnet & Christiane Eickhoff
9b	D-German	Germany	Manfred Krüger & Viktoria Wurmbacher
10	Lithuan	Lithuania	Ramune Jacobsen
11	Mandarine	Taiwan	Yen Ming Huang
12	Portugese	Portugal	Joao Gregorio
13	Slovakian	Slovakia	Patricia Schnorrerova
14	Spanish	Spain	Pilar Modamio
15	Finnish	Finland	Emma Aarnio
16	Hungarian	Hungary	Tamas Agh
17	Norwegian	Norway	Liv Mathiesen
18	Polish	Poland	Anna Golda
19	Romanian	Romania	Cristina Ghiciuc
20	Greek	Greece	Marios and Aristotelis
21	Turkish	Turkey	Cansu Goncuoglu

Done!

Ongoing

Output Wed 05/02

List of adherence interventions in 13 diff countries

	I	II	III	IV	V	VI	
	Simplify tt plan, perform MUR*	Use pillbox, alarms, apps, reminders, connect to daily routine, unit dose	Organise social support (family, friends)	Change the behavior	Improve knowledge, educate, use tt card / med plans, written material, psychocognitive	Learn from el. measures	Talk to care-givers, cooperate with nursing homes
T 1	✓	(✓)	✓	Be	✓		
T 2		✓			✓		✓
T 3	✓	✓	✓		✓		

Table 1: Bulgaria, Slovakia, Turkiye, Belgium, Taiwan

Table 2: DACH + Iceland

Table 3: Slovenia, Spain, Luxemburg, Greece

(): not common practice

* structured or unstructured



HEIDELBERG
UNIVERSITY
HOSPITAL

COOPERATION UNIT
CLINICAL PHARMACY



Quality criteria of mhealth-apps:

a step-by-step approach to find a suitable adherence-app

I. Binder, G. Rediker, V. Wurmbach, H. Seidling

Cooperation unit clinical pharmacy; Internal Medicine IX – Dept. of Clinical

Pharmacology & Pharmacoepidemiology

Heidelberg University Hospital

Im Neuenheimer Feld 410, 69120 Heidelberg



according to criteria from Santo 2016 and patients

presented by Kirstin Messner

06.02.2025

Recruitment strategies in community pharmacies

presented by Kirstin Messner

07.02.2025

Next steps for the 15-STARs

Work on a roadmap including:

- Update the PCNE website section “Working Group Med. Adherence”
=> disseminate information on
 - Available translations (and the ones “in process”)
 - Running projects
 - Finalized projects and available results / publications
 - Conditions to use the 15-STARs
- Facilitate communication among interested researchers & practitioners
- Discuss and evaluate experiences in projects