

# WS 4 - eHealth in pharmacy

## Policy statements

- Recommendations
- Barriers/facilitators

## Practical project

- Tools to be used in the various steps of medication review
- Barriers/facilitators

# Innovative, comprehensive eHealth solution for medication reviews and medication management



10th PCNE Working Conference 2017, Bled, Slovenia  
**Pharm.Care@BLED Build - Lead - Engage - Disseminate**

# Introduction

- Medication review (MR) is a particular interest of the PCNE
- MRs represent a complex pharmaceutical care service
- Increasing demand for MRs from health care commissioners
- The process is now time-consuming, which may benefit from further smart automation/data mining tools as required data are held by different actors
- An exploration of possible innovative, comprehensive eHealth solution is presented

# Main desired outcome of the programme

- Improved patient wellbeing with lower usage of healthcare resource



1. Patient selection /  
Recruitment

2. Data collection

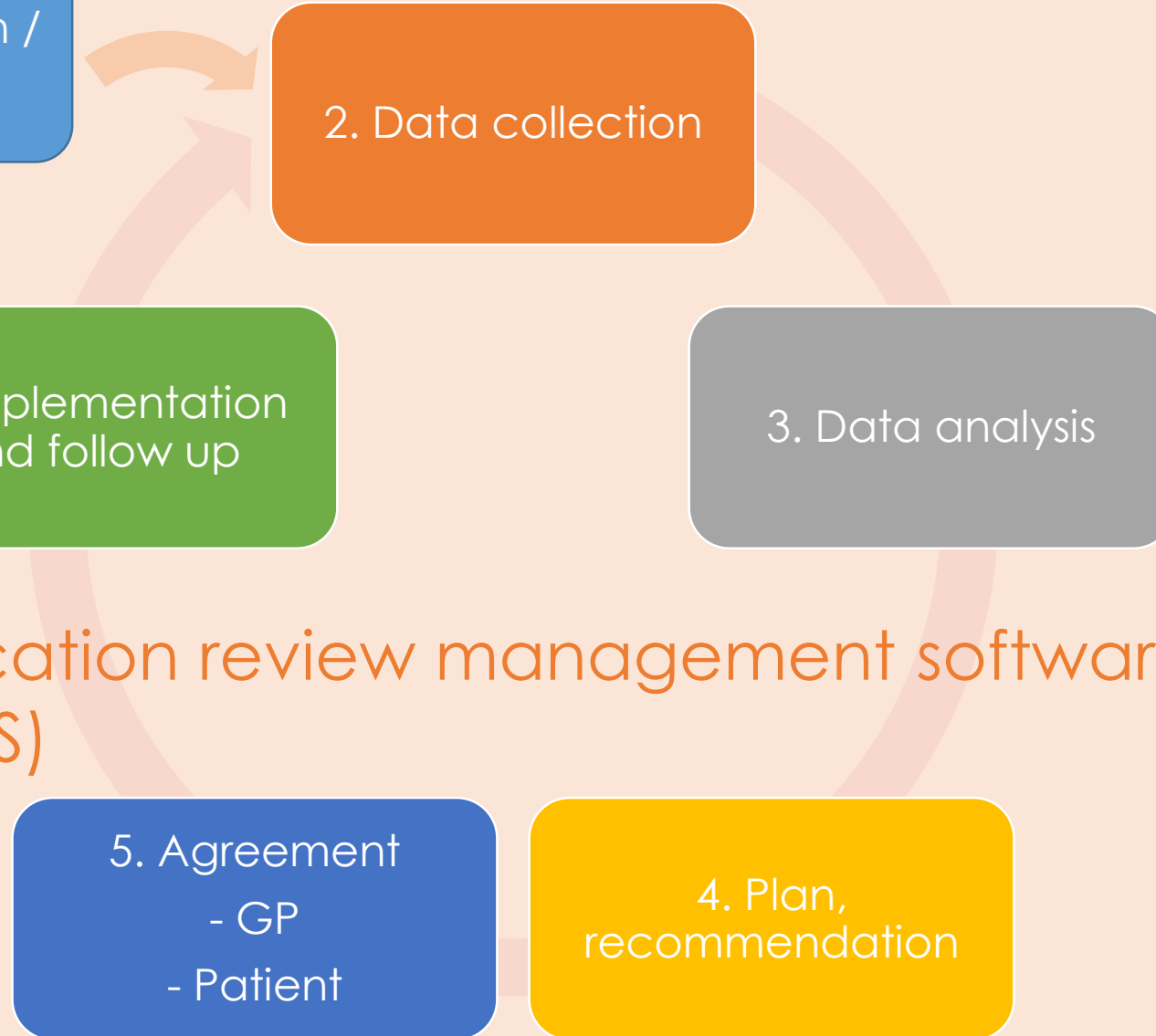
3. Data analysis

6. Implementation  
and follow up

## Medication review management software (MRMS)

5. Agreement  
- GP  
- Patient

4. Plan,  
recommendation



1. Patient selection  
Recruitment

No.	Objective	Tools
1.	Select patients	Patient selection module
2.	Validation	Patient selection module
3.	List communication	Communication module
4.	Invitation	Patient management module
5.	Patient consent	
6.	Appointment	

6. Implementation  
and follow up

3. Data analysis

## Medication review management software (MRMS)

5. Agreement  
- GP  
- Patient

4. Plan,  
recommendation

# 1. Patient selection

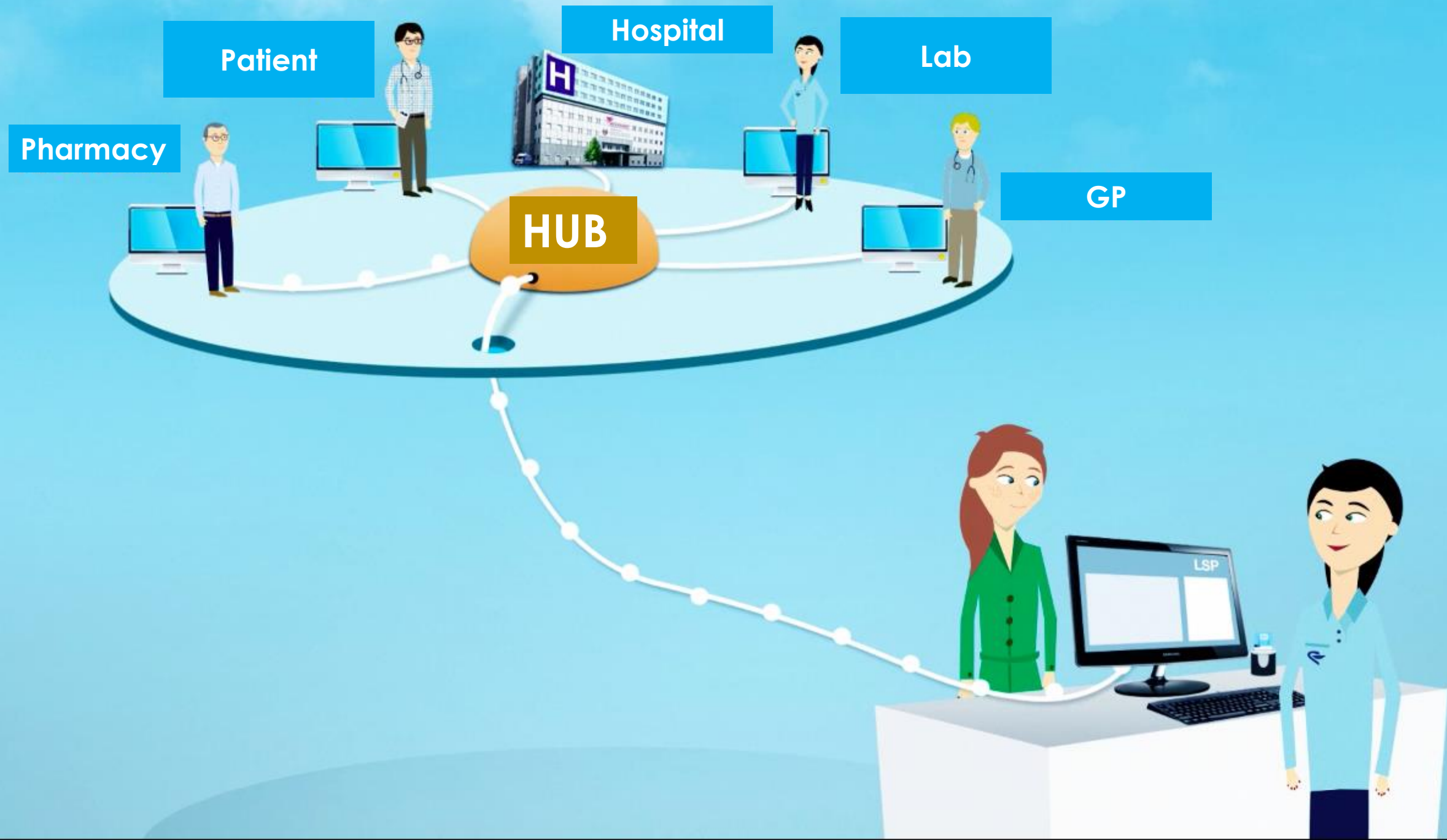
No.	Objective	Tools
1	Select patients for MR according to required criteria, e.g. 6 or more medicines	Patient selection module within new MR management software (MRMS)
2	Validation of patient selection	
3	List communicated with GP (list can be supplemented / amended by GP)	Communication automated via above module
4	Invitation communicated via email or SMS to patients	Communication module within the MRMS
5	Patient consent registered on system when the patient consents	Patient management module within the MRMS
6	Patient appointment scheduled	Patient management module within the MRMS



## 2. Data collection

No.	Objective	Tools
1	Collection of the minimum data set	Communication tool within the MRMS
	• Medication (including OTC)	• GP/specialist/pharmacy/ patient APP/health insurance
	• Diseases	• GP/specialist
	• Lab data	• GP/specialist
	• Hospitalisation/emergency department visits	• Health insurance
	• GP/specialist data	• Health insurance
	• Baseline patient data (patient reported outcomes, patient expectations)	• Patient APP





### 3. Data analysis

No.	Objective	Tools
1	Automated DRP detection	DRP analysis module to include: <ul style="list-style-type: none"><li>• National disease management guidelines</li><li>• Medication appropriateness software</li><li>• Medication safety assessment</li><li>• Untreated indications / contraindications</li><li>• Drug interactions</li></ul>
2	Automated summary of patient reported needs /concerns	<ul style="list-style-type: none"><li>• Imported from patient APP</li></ul>



## 4. Plan/recommendations

No.	Objective	Tools
1	Defining proposed interventions (including prioritization and scheduling)	Decision support system with prepopulated actions e.g. removing medication with no indication or adding medication for untreated indication

## 5. Agreement (with GP and patient)

No.	Objective	Tools
1	Data exchange with GP	Communication tool within the MRMS
2	Agreement with GP (including medication plan)	
3	Defining responsibilities and actions (including scheduling)	
4	Agreement with patient	Video conference
5	Share final version of the medication plan with GP and patient	Communication tool within the MRMS

# Example Agreement with GP (including medication plan)

Proposed intervention	Prio	Agree	Disagree	Intervention carried out by	Remarks
1. Add laxative				<div>DROP DOWN ▼<ul style="list-style-type: none"><li>Feel</li><li>Free</li><li>To</li><li>Download</li><li>This</li></ul></div>	Patient has...
2. Lower dose metoprolol					

Carried out interventions				
1. Repeat inhalation instruction				

## 6. Implementation and follow up

No.	Objective	Tools
1	Performing the MR interventions	
a	Patient education	Online library with validated eHealth material
b	Improvement of adherence	Electronic reminder etc.
c	Monitoring therapeutic outcomes	Mobile APPs, MRMS communication module
2	Management of further appointments	Management module
3	To inform patients without access to the internet	eHealth point in the pharmacy



- INHOUD VAN DE BIJSLUITER
- WAT IS PANTOPRAZOL EN WAARVOOR WORDT DIT MEDICIJN GEBRUIKT?
- WANNEER MAG U DIT MEDICIJN NIET GEBRUIKEN OF MOET U ER EXTRA VOORZICHTIG MEE ZIJN?
  - Wanneer mag u dit medicijn niet gebruiken?
  - Wanneer moet u extra voorzichtig zijn met dit medicijn?
  - Gebruikt u nog andere medicijnen?
  - Waarop moet u letten met eten, drinken en alcohol?
  - Zwangerschap en borstvoeding
  - Rijvaardigheid en het gebruik van machines
- HOE GEBRUIKT U DIT MEDICIJN?
  - Wijze van gebruik
  - Heeft u te veel van dit medicijn ingenomen?
  - Bent u vergeten dit medicijn in te nemen?
  - Als u stopt met het innemen van dit medicijn?
- MOGELIJKE BIJWERKINGEN
  - Het melden van een bijwerking
- HOE BEWAART U DIT MEDICIJN?
- INHOUD VAN DE VERPAKKING EN OVERIGE INFORMATIE



1. Patient  
selection /  
Recruitment

2. Data collection

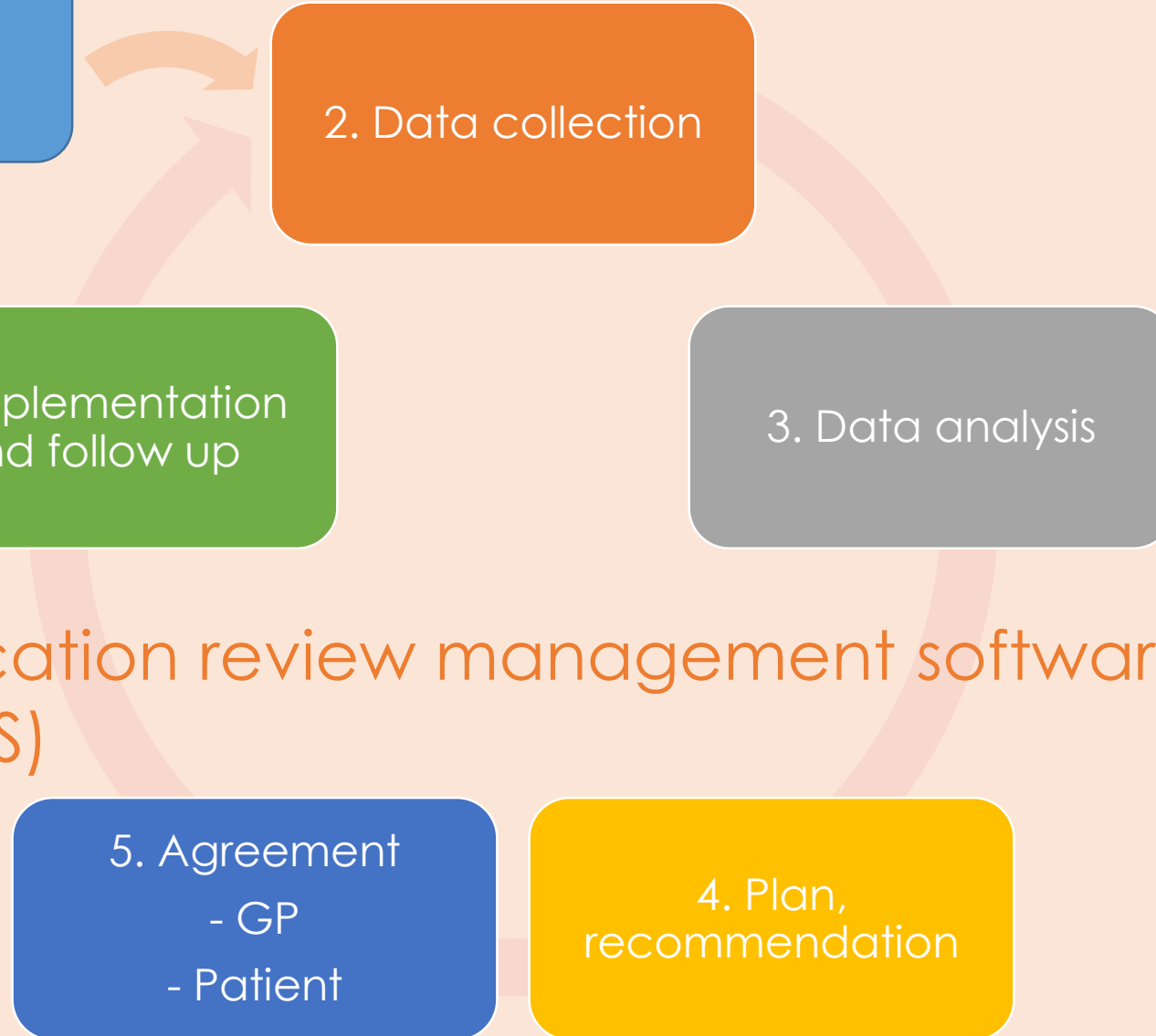
3. Data analysis

6. Implementation  
and follow up

## Medication review management software (MRMS)

5. Agreement  
- GP  
- Patient

4. Plan,  
recommendation



# Workshop 4

E-health: practical part



10th PCNE Working Conference 2017, Bled, Slovenia  
**Pharm.Care@BLED Build - Lead - Engage - Disseminate**