



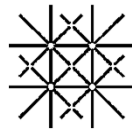
# A Core Outcome Set for studies testing interventions to optimise medication use following hospital discharge

## An international Delphi study

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# Agenda.

- Background and aim
- Where it all started
- Methods Delphi study
- Results Delphi study
- **Core Outcome Set** for studies investigating optimization of medication use following hospital discharge
- Limitations & conclusion

# Background & aim.

- Hospital discharge is a well known risk for medication related harm
- A **lot of research** has been done for years
- We know there are **efficacious interventions** to reduce said risk

**BUT** studies use **varied outcomes with inconsistent terminology**

**And thus:**

- We **cannot compare** them
- We **cannot perform** a meta-analysis to **show effectiveness**
- This is a **barrier** to implementing new services

**We aimed at developing a Core Outcome Set for studies investigating interventions to optimise medication use following hospital discharge.**

## Start: PCNE 2017



Concept

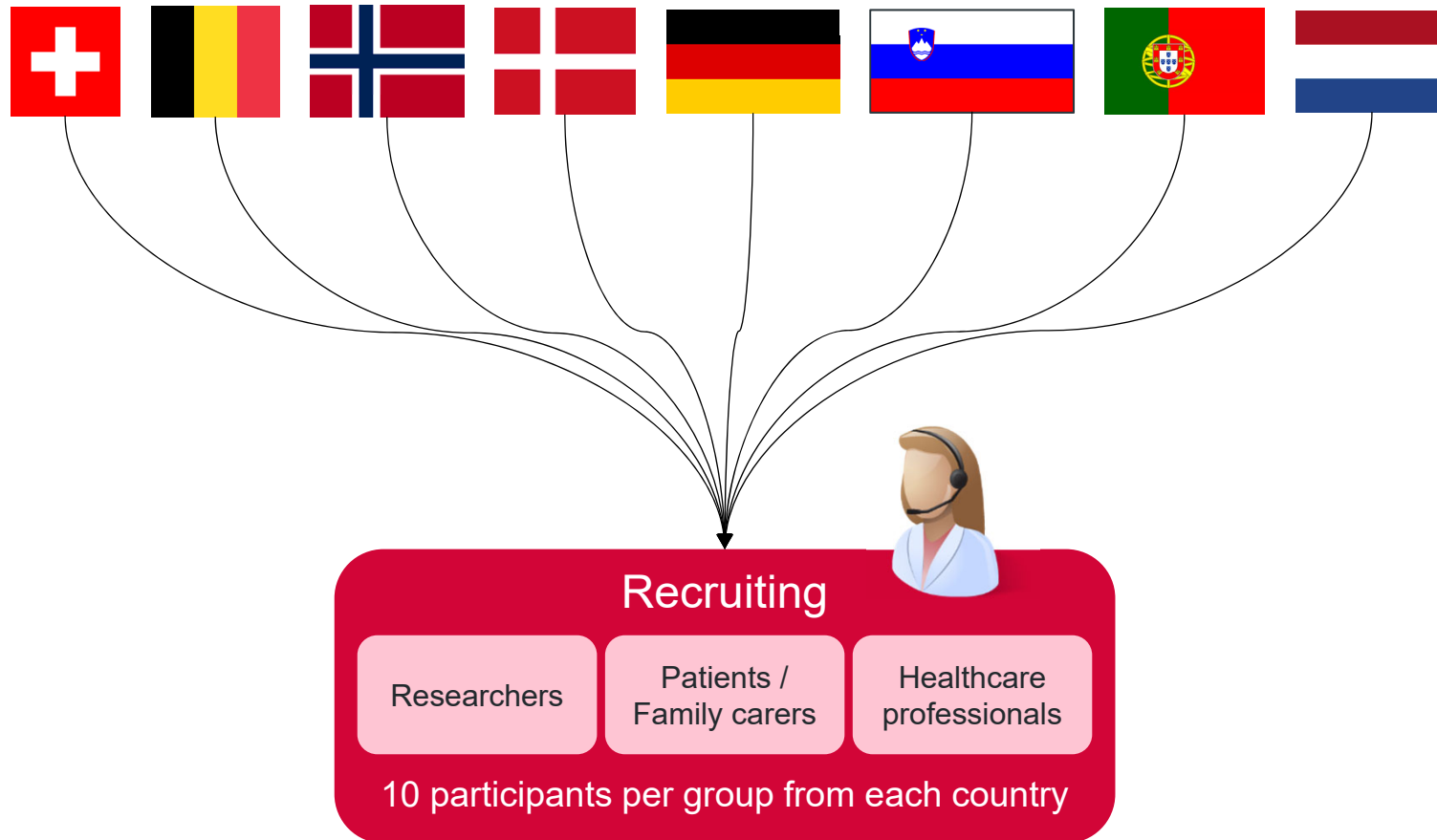
Systematic  
review

Delphi  
study

1. Williamson PR, Altman DG, Bagley H, Barnes KL, Blazeby JM, Brookes ST, et al. The COMET Handbook: version 1.0. *Trials*. 2017 Jun 20;18(3):280.

2. Beuscart JB, Knol W, Cullinan S, Schneider C, Dalleur O, Boland B, et al. International core outcome set for clinical trials of medication review in multi-morbid older patients with polypharmacy. *BMC Medicine*. 2018 Feb 13;16(1):21.

# Methods recruiting.



# Methods consensus process.

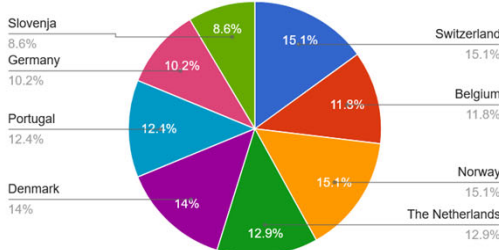
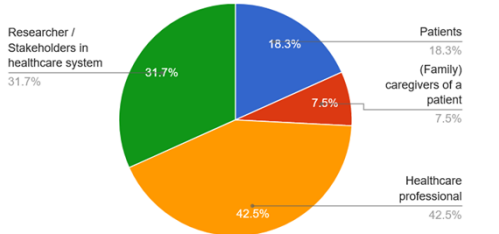
- Scoring: 9-point Lickert scale
- Retaining criteria per group: 20% highest rated outcomes per group
- Possibility to add new outcomes
- Feedback forms

## Round 1

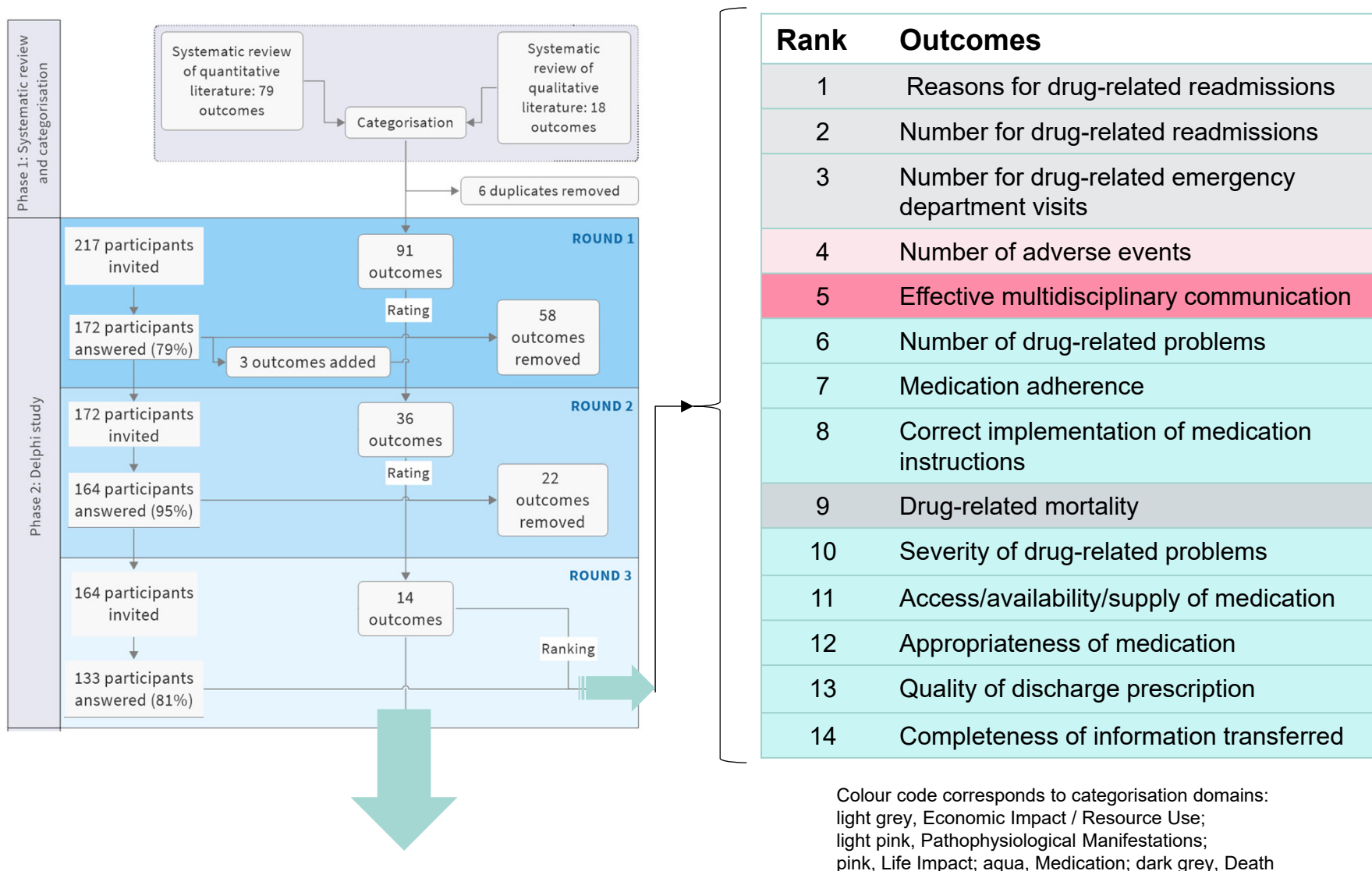
Expert discussion with online voting  
(yes/no; consensus criterion 75% yes votes)



# Results: Overview of the Demographics.

Data	Round 1	Round 2	Round 3
Response rate	172 of 217 (79%)		
Gender			
Female	119 (64.0%)		
Male	66 (35.5%)		
Other	1 (0.5%)		
Age, mean (SD)	49 years (±13)		
Country of residency			
Participant group			

# Results: Overview Outcomes.





# Final Core Outcome Set.

Rank	Outcomes
1	Reasons for drug-related readmissions
2	Number for drug-related readmissions
3	Number for drug-related emergency department visits
4	Number of adverse events
5	Effective multidisciplinary communication
6	Number of drug-related problems
7	Medication adherence
8	Correct implementation of medication instructions
9	Drug-related mortality
10	Severity of drug-related problems
11	Access/availability/supply of medication
12	Appropriateness of medication
13	Quality of discharge prescription
14	Completeness of information transferred



## 2 Number of drug-related readmissions 100% yes votes

Number of patients, who are readmitted within 1 month after discharge due to problems with medication, e.g. because of overdosing or side effects. Admitted to the hospital means that they stay over night at the hospital.

## 6 Number of drug-related problems 77.8% yes votes

Number of problems related to the use of medication that had a clinical consequence within 1 month after discharge.

# Limitations.

- Smaller proportion of patients than anticipated
- Understanding of the complex topic
- Protocol had to be adapted at some points
- No involvement of patients and healthcare professionals in the final decision



# Conclusion.

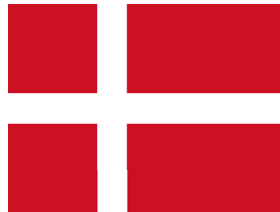
The core outcome set for studies testing interventions to optimise medication management at hospital discharge contains **‘Number of drug-related readmissions’** and **‘Number of drug-related problems’**.

We recommend research teams to also consider the **other outcomes on the final ranking list**, as these outcomes have been agreed on by patients, healthcare professionals and researchers.

# Thank you to all co-working researchers / teams.



Liv Mathiesen  
Kirsten Viktil  
Marianne Lea



Trine R.H.  
Andersen



Isabel Waltering



Ema Paulino



Martina Teichert  
Jacqueline  
Hugtenburg



Mitja Kos



**Veerle Foulon**

# Thank you to the Pharmaceutical Care Research Group





Universität  
Basel

**Thank you!**  
for your attention

**Poster  
724**

