

# Implementation of Safe Clinical Practices Work Package 5

Lena Mehrmann, Tugce Aksoy, Christian Thomeczek German Agency for Quality in Medicine (AQuMed / AEZQ)

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### Conflict of interest declaration

I declare having no conflict of interest linked to the work presented.







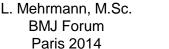
# Work Package 5 – Patient Safety Initiatives Implementation

#### Content

- Implementation of selected Safe Clinical Practices (SCPs) in Healthcare Organisations (HCOs) in 18 European countries
- Compilation of one tool box per SCP
- Monitoring and assessment of implementation process









# Work Package 5 – Patient Safety Initiatives Implementation

### Results

- Report on implementation experiences
- Tested tool boxes to what extent have they been helpful?







# Work Package 5 Schedule

Activity	Start and termination
I. Collection and Selection of Safe Clinical Practices (SCPs) for Implementation	July 2012 – January 2013
II. Collection and Compilation of Implementation Tools	February – June 2013
III. Recruiting of Healthcare Organisations (HCOs) for Implementation	February – June 2013
IV. Training of Multiplicators	July 2013 – December 2014
V. Monitoring and Assessment of Implementation Process	May 2013 – January 2015
VI. Final Report	December 2014 – January 2015









## Work Package 5 Schedule

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Start of implementation in HCOs: July 1st – September 1st 2013









WHO Surgical Safety Checklist



13 countries







- WHO Surgical Safety Checklist
- Medication Reconciliation



11 countries







- WHO Surgical Safety Checklist
- Medication Reconciliation
- Multimodal intervention to increase hand hygiene compliance

11 countries





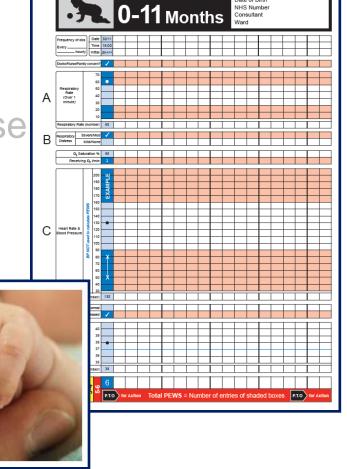






- WHO Surgical Safety Checklist
- Medication Reconciliation
- Multimodal intervention to increase compliance
- Paediatric Early Warning Scores

5 countries









### 18 participating countries

- Austria
- Bulgaria
- Croatia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Netherlands
- Norway
- Poland
- Spain
- Slovakia
- United Kingdom



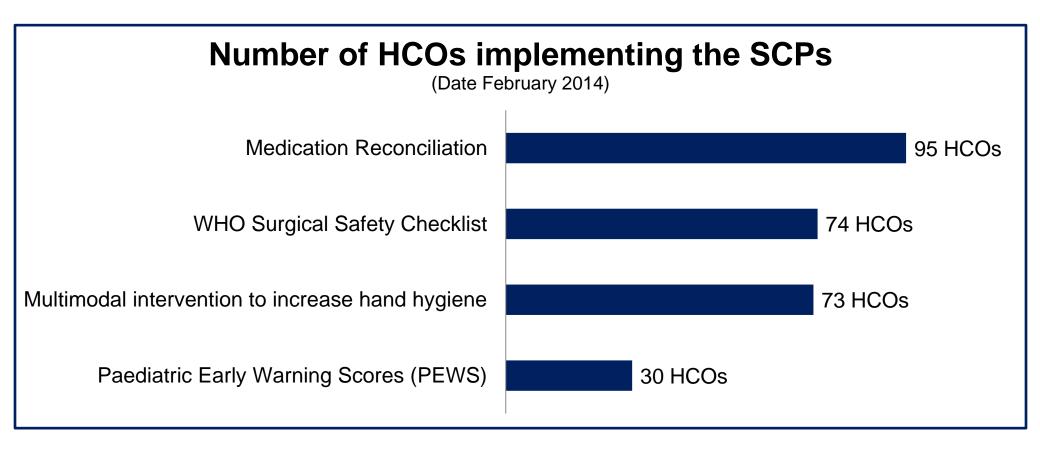


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## 200 participating HCOs\*



\* Several HCOs apply more than one SCP









Implementation tool box for each SCP

publicly available on:

http://www.pasq.eu/Wiki/SCP/ WorkPackage5ToolBoxes











Content of the tool boxes

Medication Reconciliation > Innovator

SCP: Medication Reconciliation Innovator of the SCP and country of origin

Medication Reconciliation has been established in the past decade particularly in the USA, Canada and Australia. The majority of publications come from the USA and Canada; further publications are available from Europe.

#### Medication Reconciliation

The aim of this Safe Clinical Practice (SCP) is to identify and correct medication errors (unintentional medication discrepancies) across transitions of care.

Transitions in care such as admission to and discharge from the hospital put patients at risk for errors due to poor communication and inadvertent information loss. Up to 67% of patients admitted to the hospital have unintended medication discrepancies, and these discrepancies remain common at discharge (Kwan et al 2013). Almost one-third of medication discrepancies occurring at hospital admission or discharge have the potential to cause patient harm (i.e., potential adverse drug events) (Mueller et al 2012). Adverse drug events associated with medication discrepancies can prolong hospital stays and, in the postdischarge period, may lead to emergency department visits, hospital readmissions, and use of other health care resources (Mueller et al 2012).

For more information have a look at the following links:

Innovator of the SCP and country of origin

Short description of the SCP and information on implementation

Stepwise approach to implementation

Information on needed resources

Summary of evidence for effectiveness

References

Specific Tools



PDF version of the information on the SCP WHO Medication Reconciliation.







#### Content of the tool boxes

Medication Reconciliation > Short Description

#### SCP: Medication Reconciliation Short description of the SCP and information on implementation

Medication Reconciliation is the process of identifying the most accurate list of all medications a patient is taking and using this list to provide correct medications for patients within the health care system (IHI 2011).

The majority of the available literature on Medication Reconciliation focuses on hospital-based transitions in care (Kwan et al 2013). For this reason, the below information is most applicable to hospital care. However, Medication Reconciliation can also be implemented in facilities in other settings i.e. primary care, long-term care and home care (see below for more information).

Health care organisations (HCOs) which will implement this SCP within Work Package 5 of the PaSQ Project are expected to introduce the following three-step Medication Reconciliation process (ISMP Canada 2011):

Create a complete and accurate Best Possible Medication History (BPMH)
of all the patient's prescribed and nonprescribed medications including
name, dosage, route and frequency. More comprehensive than a routine
primary medication history, the BPMH involves two steps:

I, a systematic process of interviewing the patient/family and

II. verification of this information with at least one other reliable source of information (for example, patient medication lists, a community pharmacy, a primary care physician, a government medication database, medication vials)

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#### Content of the tool boxes

Medication Reconciliation > Stepwise approach to implementation

#### SCP: Medication Reconciliation Stepwise approach to implementation

The following outlines the key steps for getting started on the implementation of Medication Reconciliation (modified from the "Medication Reconciliation in Acute Care Getting Started Kit", ISMP Canada 2011), More detailed information can be found within the tools included in this tool box (e.g. Getting Started Kits of ISMP Canada).

#### 1. Secure senior leadership commitment

Implementing a successful Medication Reconciliation process requires clear commitment and direction from the highest level of the organisation.

#### 2. Form a team

Teamwork is an integral part of the Medication Reconciliation process. Medication Reconciliation is not owned by one discipline. Clinical champions can contribute significantly to successful implementation.

Representation of the coordination team could include:

- Senior Administrative leadership (executive sponsor)
- Clinical leaders representing physicians, nursing and pharmacy staff
- Front line caregivers from key settings of care, and from all shifts
- Representatives from other work units or committees whose responsibilities/mandates include the improvement of patient safety (e.g. Patient Safety Officer, representatives from Quality Improvement/Risk Management, Patient Representatives, Pharmacy and Therapeutics committee)

#### Patient and/or family member. European Union Network for Patient Safety and **Ouality of Care**

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#### Content of the tool boxes

Medication Reconciliation > Needed Resources

#### SCP: Medication Reconciliation Information on needed resources

The implementation of Medication Reconciliation is resource-intensive. This is especially true if pharmacists are involved in conducting Medication Reconciliation, because this requires substantial investment of resources beyond usual care. Nevertheless, a systematic review of economic analyses of patient safety strategies came to the conclusion that pharmacist-led Medication Reconciliation is one of five economically attractive strategies for improving patient safety (Etchells et al 2012). In one model-based study, which was included in the systematic review, the authors estimated the cost for implementing pharmacist-led Medication Reconciliation at £ 1897 (ca.  $\leq$  2200 as of March 14<sup>th</sup> 2013) per 1000 prescription orders (Karnon et al 2009).

Medication Reconciliation can be integrated into applications as Computerized Physician Order Entry (CPOE) and Electronic Medical Records (EMR), although it can also be conducted paper-based if such systems have not been introduced in the facility.

Thorough training of staff, e.g. on creating the BPMH, is of utmost necessity.

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### Content of the tool boxes

Medication Reconciliation > Summary of Evidence

### SCP: Medication Reconciliation Summary of evidence for effectiveness

The effect of hospital-based Medication Reconciliation on medication errors and (potential) adverse drug events has been investigated in many studies and summarized in systematic reviews (Mueller et al 2012, Kwan et al 2013). Both reviews come to the conclusion that Medication Reconciliation is a potentially promising intervention.

The systematic review by Mueller et al 2012 included 26 controlled studies and reasoned that Medication Reconciliation consistently reduced medication discrepancies, potential adverse drug events (i.e., clinically significant discrepancies) and adverse drug events. The impact on post discharge health care utilization (i.e., readmissions) was inconsistently shown. Key aspects of a successful intervention included pharmacy staff involvement and focusing on a high risk patient population. The study quality was judged to be poor in fifteen of the 26 studies (Mueller et al 2012).

The systematic review by Kwan et al 2013 included eighteen studies evaluating 20 interventions. Inclusion criteria were more restrictive than in the previously described review; only studies evaluating clinically significant unintended discrepancies or emergency department visits and readmission within 30 days of discharge were considered. The authors come to the conclusion that hospital-based Medication Reconciliation at care transitions frequently identifies unintended discrepancies; however few of these discrepancies seem to have a clinical significance. Furthermore, Medication Reconciliation alone probably does not reduce postdischarge hospital utilization within 30 days but may do so when bundled with other interventions that improve discharge coordination<sup>1</sup>. Like the previously described review, this review also found that pharmacists play a major role in successful interventions; however, contrary to the other review, focusing on high risk patients did not seem to consistently improve the effect of Medication Reconciliation (Kwan et al 2013).

A systematic review on the effectiveness of Medication Reconciliation in the

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#### Content of the tool boxes

Medication Reconciliation > References

### SCP: Medication Reconciliation References

Bayoumi I, Howard M, Holbrook AM, Schabort I. Interventions to improve medication reconciliation in primary care. Ann Pharmacother. 2009;43(10):1667-75

Etchells E, Koo M, Daneman N, McDonald A, Baker M, Matlow A, Krahn M, Mittmann N. Comparative economic analyses of patient safety improvement strategies in acute care: a systematic review. BMJ Qual Saf. 2012; 21(6): 448-56

Institute for Healthcare Improvement. Medication Reconciliation Review. 2011. Available from: <a href="http://www.ihi.org/knowledge/Pages/Tools/MedicationReconciliationReview.aspx">http://www.ihi.org/knowledge/Pages/Tools/MedicationReconciliationReview.aspx</a> (Accessed March 14th 2013)

Institute for Safe Medication Practices Canada (ISMP Canada), Medication Reconciliation in Acute Care Getting Started Kit. Version 3.0, 2011, Available from: http://www.ismp-canada.org/medrec/ (Accessed March 14th 2013)

Karnon J, Campbell F, Czoski-Murray C. Model-based cost-effectiveness analysis of interventions aimed at preventing medication error at hospital admission (medicines reconciliation). J Eval Clin Pract. 2009;15:299-306

Kwan JL, Lo L, Sampson M, Shojania KG. Medication Reconciliation During Transitions of Care as a Patient Safety Strategy. A Systematic Review. Ann Intern Med. 2013;158:397-403. Available from: <a href="http://annals.org/article.aspx?articleid=1656444">http://annals.org/article.aspx?articleid=1656444</a> (Accessed March 14th 2013)

Mueller SK, Sponsler KC, Kripalani S, Schnipper JL. Hospital-Based Medication Reconciliation Practices. A Systematic Review. Arch Intern Med. 2012;172(14):1057-69

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#### Content of the tool boxes

The following specific tools were submitted during the questioning of the PaSQ MS:

	Name of the tool	Type of tool
$\rightarrow$	ACADEMIA	<ul> <li>Tool for evaluation and feedback</li> <li>Tool for reminding staff in the workplace</li> </ul>
$\rightarrow$	Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation	<ul> <li>Tool for promotion of a safety culture</li> </ul>
$\rightarrow$	Poster to prompt patients to bring their list of medications with them to Wexford General Hospital and outpatient clinics	<ul> <li>Tool for promotion of a safety culture</li> <li>Tool for information of patients and relatives</li> </ul>
$\rightarrow$	START (screening tool to alert doctors to the right treatment)	<ul> <li>Tool for reminding staff in the workplace</li> </ul>
$\rightarrow$	STOPP (Screening Tool of Older Persons' Prescriptions)	<ul> <li>Tool for reminding staff in the workplace</li> </ul>

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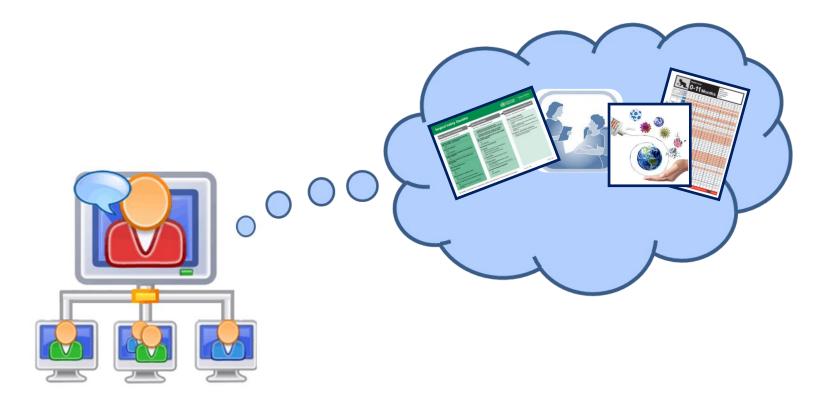


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Webinars are organised for each SCP





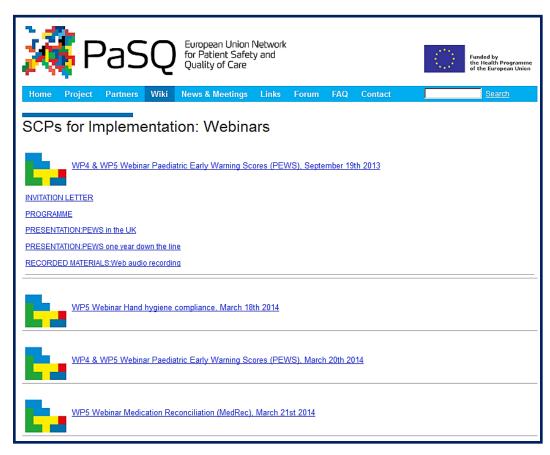




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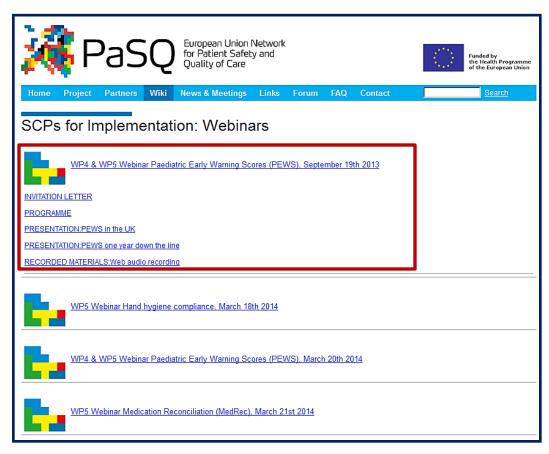




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## Instruments to monitor implementation

 Self-assessment tool for each SCP

Self-assessment Tool for the Monitoring Process WHO Surgical Safety Checklist				PaSQ	
b. To which degree have the <u>process steps of the practice</u> been implemented?  Note for completing:  For each statement, please select the most appropriate option. If the answers vary according to the area, you have to tick more than one option; in this case please <u>also</u> tick the answer box in the far right column.					
	Not at all implemented	Partly implemented	Fully implemented	Please <u>additionally</u> tick this box, if this varies according to the area	
The process steps related to the phase "Before induction of anaesthesia" have been implemented (meaning tha items from this phase are being verified and completed in the checklist).	t 🗆				
The process steps related to the phase "Before skin incision" have been implemented (meaning tha items from this phase are being verified and completed in the checklist).	t 🗆		0		
3. The process steps related to the phase "Before patient leaves operating room" have been implemented (meaning that items from this phase are being verified and completed in the checklist).	e 🛘				
(A) designated checklist coordinator(s) lead(s) the checklist process to confirm the completion of each step			0		







### Instruments to monitor implementation

- Self-assessment tool for each SCP
  - The use of the tool is voluntary for the HCOs and for their internal use only
  - Aim: help HCOs in the ongoing implementation process between baseline and endline questionnaire → implementation achievements so far

	f-assessment Tool for the Mon HO Surgical Safety Checklist	itoring Process			§ PaSQ
b.	To which degree have the <u>process steps of the practice</u> been implemented?  Note for completing:  For each statement, please select the most appropriate option. If the answers vary according to the area, you have to tick more than one option; in this case please <u>also</u> tick the answer box in the far right column.				
		Not at all implemented	Partly implemented	Fully implemented	Please <u>additionally</u> tick this box, if this varies according to the area
1.	The process steps related to the phase "Before induction of anaesthesia" have been implemented (meaning that items from this phase are being verified and completed in the checklist).				
2.	The process steps related to the phase "Before skin incision" have been implemented (meaning that items from this phase are being verified and completed in the checklist).		П	0	
3.	The process steps related to the phase "Before patient leaves operating room" have been implemented (meaning that items from this phase are being verified and completed in the checklist).		О	0	
4.	(A) designated checklist coordinator(s) lead(s) the checklist process to confirm the completion of each step.				







### Instruments to evaluate implementation

- Baseline questionnaires: September 2013
- Endline questionnaires: September 2014



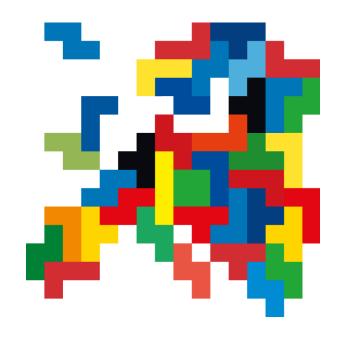








# Thank you for your attention.



PaSQ\_Germany@azq.de







