



# **WP3**

## **PaSQ Evaluation**

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**Nothing will ever be attempted**

,

**if all possible objections**

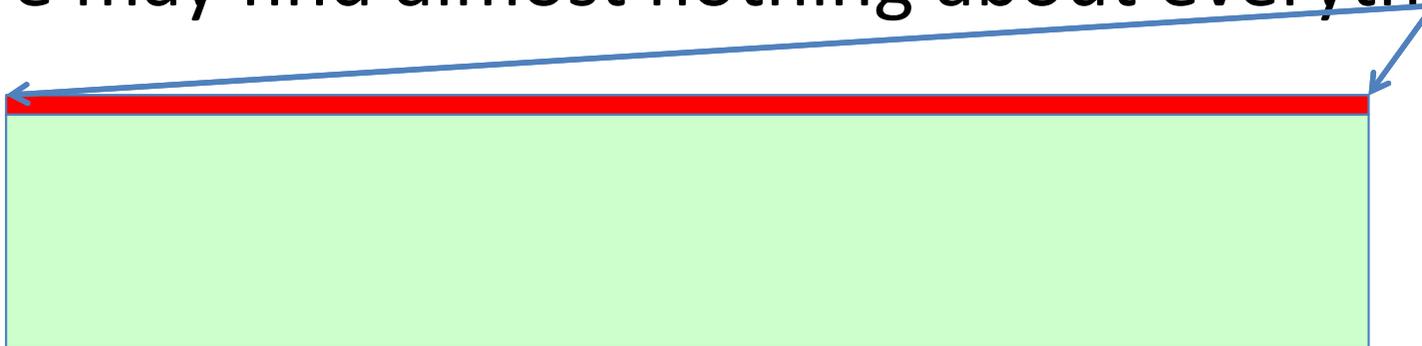
**must be first overcome**

*Samuel Johnson, 1759*

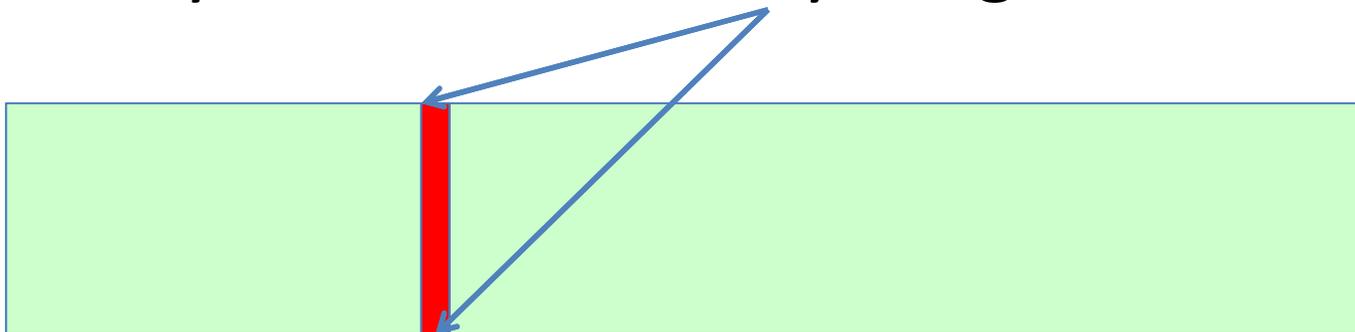
# What should we search for to find?

## Facing a challenging dilemma:

1. We may find almost nothing about everything



2. We may find almost everything about nothing



# What type of evaluation do we need in an Action Program, like PaSQ?

**monitoring** is about recording what has happened, in terms of deliverables of the Project,

whereas,

**evaluation** is concerned with assessing what has been **achieved** and how any **changes** have come about.

# The goal of PaSQ evaluation

The overarching goal of PaSQ evaluation was more towards a **constructive and critical basic appraisal**, rather than towards a detailed affirmation of the good work that has been done during Project's lifecycle

# WHO definition of evaluation

The systematic examination and assessment of the features of an initiative and its effects, in order to produce information that can be used by those who have an interest in its improvement or effectiveness.

# Taking into consideration Sprigett's perspective

The aim of PaSQ evaluation is to contribute towards solving practical problems, in terms of **what works** and why.

It is about collecting information to inform action.

**Most of all**, it is about **learning from experience**

# A key distinction for the type of PaSQ evaluation

We kept in mind that the findings of  
PaSQ evaluation are principally meant  
**to inform decision-makers**

(contrast to research evaluation reports  
that contribute to the development of  
general academic knowledge and  
understanding)

# Another challenge for PaSQ evaluation

Should we focus on predetermined goals?

or

be open to **unanticipated outcomes?**

# PaSQ evaluation

Formative evaluation?

or/**and**

**Summative** evaluation?

# Which model of evaluation is more suitable for PaSQ?

1. Goal-orientated evaluation : effectiveness, efficiency and economy of an intervention
2. **Decision-orientated evaluation** : improve decision-making
3. **Responsive evaluation** : process of evaluation and perspectives of participants
4. Goal-free evaluation : **openness to achievements** additional to the intervention's objectives
5. **Utilization-oriented evaluation** : utility of findings to different stakeholders

# A diverse group of PaSQ stakeholders

- Funding organizations
- Project partners
- Diverse target population groups, like patients and health professionals
- Policy-makers at national and EU level
- Healthcare industry
- Academia, research institutions

# The different views of stakeholders

- Funders are concerned with accountability and achieving value for money
- Health professionals involved in implementation may be concerned with achieving health outcomes
- Academics are interested in new knowledge
- All kind of end users may be concerned with whether their own **perceived needs are being addressed**

# What stakeholders expect from PaSQ evaluation?

- **Responsive** to their needs
- Objective
- **Realistic**
- Reliable/accurate
- **Transferable/generalizable**

# The possible mistakes in evaluating PaSQ interventions

(a) The wrong conclusion that an intervention has achieved significant change when it has actually failed to do so (Type I).

(b) The wrong conclusion that an intervention has failed to have a significant effect when it actually has done so (Type II).

(c) Judging that an intervention has failed when it was so poorly designed that it could not have achieved the desired effect (Type III).

# Type III errors in PaSQ implementation

In the frame of PaSQ implementation a considerable (and effective) **effort** was made to **avoid Type III errors**, since the proposed interventions (PSPs and GOPs) were very closely examined in regard to their sufficiency, safety, comprehensiveness, acceptability, as well as in terms of meeting identified needs.

Due to the multifactorial nature of PaSQ interventions, both at clinical and organizational level (PSPs and GOPs), any change is likely to be:

(a) small,

(b) difficult to detect, and

(c) may appear and become evident much later,

particularly for small-scale and not specially designed for specific interventions studies, like PaSQ, which inevitably **cannot have sufficient power** to reveal a significant difference, **even when we achieve what health professionals agree is a meaningful level or change.**

# Statistical vs Practical significance

In PASQ, we take the following standpoint:

Since statistical power was not feasible, in terms of time horizon as well as available resources,

a satisfactory level of **practical significance** was effectively sought among partners.

# Internal and external validity in PaSQ evaluation

## **Internal validity:**

The extent to which the detected changes are attributable to PaSQ interventions

## **External validity:**

The extent to which our findings are applicable to other environments and contexts

**(a crucial issue for PaSQ's sustainability)**

# Hawthorne effect in PaSQ interventions

PaSQ evaluation has inevitably been limited by Hawthorne effect.

It is expected that during PaSQ's extension period Hawthorne effect will be alleviated, **permitting for a more realistic assessment of interventions' casual influence.**

# Attributing factors of PaSQ interventions

A number of factors have **influenced the achievement of interventions**:

1. **Fidelity** in the application of interventions
2. **Perceived relevance** and acceptability of interventions to different professional groups that participated
3. Differences in the way the health professionals perceived and responded to the intervention
4. The existence of all other **concomitant conditions** supportive or discouraging change.

- The relationship between inputs and outputs is usually not expected to be linear, but it is expected to be **context-dependent**.
- Different aspects of the policy environment as well as different interventions have inevitably interacted.
- A number of elements may need to be in place before an intervention can be effective.
- **An intervention may have no effect at all until other necessary conditions are in place and, once they are, it may produce very rapid change.**

In PaSQ it was practically impossible to examine all the details inside the black box (namely to explore relationships between inputs and outcomes of each intervention).

It was also recognized that it was not technically possible to identify contextual factors as potential sources of confounding.

Thus, **the intention was to understand the overall impact, due to PaSQ interventions**

# PaSQ evaluation :

## Adoption of WHO methodological approach

- Utilization of multiple methods by “employing a broad **range of information gathering** processes”.
- Recognition of the value of **methodological pluralism** that offers complementary insights.
- We accepted that establishing **absolute proof** in the domain of healthcare is in most of the cases, **unrealistic**.

# Basic aspects for evaluating PaSQ's interventions (1)

- 1. Purpose.** This fundamental aspect was **agreed by the key stakeholders** and was made explicit at the outset of the Project
- 2. Practicality.** The **common understanding** that generated **among partners** was of practical relevance.
- 3. Process.** Knowing under what circumstances change is achieved is as important as identifying outcomes. Therefore, we tried to **consider processes as well as outcomes.**

## Basic aspects for evaluating PaSQ's interventions (2)

4. **Contextual factors.** The role and influence of **contextual factors were considered** to the extent possible.

5. **Probing.** Evaluation attempted to provide something more than simple input–output findings in order to **offer explanations of more general relevance.**

6. **Plurality.** **Multiple methods for gathering information** were used.

## Basic aspects for evaluating PaSQ's interventions (2)

7. **Participation.** A range of perspectives to define scope and methods and seek to **involve all those with a legitimate interest** were drawn.

8. **Plausibility.** PaSQ findings **try to make sense to major stakeholder** groups and be consistent with their practices and experience.

9. **Politics.** The **findings will inform policy decisions** at a number of different levels (organization, regional and national policy, EU policy) and contribute more generally to the evidence base.

# PaSQ Evaluation indicators

## An overview



# Setting PaSQ indicators

PaSQ indicators were set at a “**realistic**”, doable level, in terms of their complexity, since the most of the **limitations** were known at the outset of the Project (e.g. **resources** compared to the **plethora** of participating **organizations**, **short time** horizon), methodological obstacles and **organizational barriers** were anticipated to be quite substantial and to a great extent unpredictable.

## Acknowledging the limitations of the selection of Project's indicators

- PaSQ indicators do not describe each situation under scrutiny directly and in its entirety
- They can only roughly and indirectly indicate what the situations due to PaSQ interventions are, and they effectively **provide a useful clue to potentially unmeasurable phenomena**

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Process Indicators

### 1. Number of EMs

**94% of planned exchange mechanisms were held**

- Numerator: no of exchange mechanisms held = **33**
- Denominator: no of exchange mechanisms planned = **35**

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Process Indicators

2. Number of partners with specified needs for **sharing** SCP and PSP

2a) % of partners with specified needs for SCP

- Numerator: no of partners specified needs for SCP =
- Denominator: no of partners participating in EM = 60

2b) **27% of partners with specified needs for PSP**

- Numerator: no of partners specified needs for PSP = 16
- Denominator: no of partners participating in EM = 60

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Output Indicators

1. Number of partners sharing SCP and PSP through exchange mechanism

1a) % of partners sharing SCP through exchange mechanism

- Numerator: no of partners sharing SCP through exchange mechanism = ?
- Denominator: no of partners participating = 60

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

1b) % of partners sharing PSP through exchange mechanism

- Numerator: no of partners sharing PSP through exchange mechanism = 16
- Denominator: no of partners participating = 60

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Output Indicators

2. Average number of health care professionals participating in the exchange mechanism per WP4 AP with a budget for exchange mechanisms

% of health care professionals participating in the exchange mechanism

Numerator: no of health care professionals per WP4 AP with a budget for exchange mechanisms **participating** in the EM = ?

Denominator: no of health care professionals per WP4 AP with a budget for exchange mechanisms = ?

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Outcome Indicators

1. Proportion of partners who systematically use the EM (Stratified in partners with / without a dedicated budget) (**partners with budget = 31**)

1a) **61% of partners with a budget for exchange mechanisms systematically using the EM**

- Numerator: no of partners with a budget for exchange mechanism **systematically** using the EM = **19**

- Denominator: no of partners with a budget for exchange mechanism participating = **31**

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

1b) % of partners without a budget for exchange mechanism systematically using the EM

- Numerator: no of partners without a budget for exchange mechanism **systematically** using the EM =
- Denominator: no of partners without a budget for exchange mechanism participating = 29 (60-31)

# Objective 1: Patient Safety good clinical practice exchange mechanism (WP4)

## Outcome Indicators

2. Proportion of health care professionals who participate (1) in the exchange mechanism (2), and report, that they are satisfied (3)

**89 % of health care professionals satisfied by the exchange mechanism**

- Numerator: no of health care professionals satisfied by the exchange mechanisms = 145
- Denominator: no of health care professionals participating in the exchange mechanisms = 163

# Objective 2: Patient Safety and Quality of Care good practice exchange platform (WP4)

## Process Indicators

1. Development of an interactive IT platform for sharing PSP and GOP

**212 % of entities (functionalities) developed on the interactive IT platform**

- Numerator: no of entities developed = 17
- Denominator: no of entities planned to be developed = 8

# Objective 2: Patient Safety and Quality of Care good practice exchange platform (WP4)

## Process Indicators

2. Number of reported patient safety practices accessible via web tool

**100 % of reported patient safety practices (that met the criteria) accessible via web tool**

- Numerator: no of reported patient safety practices accessible via web tool = 345
- Denominator: no of reported patient safety practices selected = 345 (**out of 595**)

# Objective 2: Patient Safety and Quality of Care good practice exchange platform (WP4)

## Outcome Indicators

1. Sharing of PSP through an interactive IT platform  
% of PSP shared through an interactive IT platform (?)
  - Numerator: no of PSP shared through an interactive IT platform
  - Denominator: no of PSP accessible via IT platform

## Objective 2: Patient Safety and Quality of Care good practice exchange platform (WP4)

### Outcome Indicators

2. Number of “hits” to the Wiki displaying the PSP and the GOP

3.7 % of “hits” to the Wiki displaying the PSP and the GOP (but not during the same period)

- Numerator: **number of “hits” to the Wiki platform displaying the PSP and the GOP = 10108**
- Denominator: no of hits” to the Wiki in general = **292203**

## **Objective 3: Patient Safety good practices implementation (WP5)**

- **Process Indicators**

Number of patient safety themes included in the literature review for Safe Clinical Practices (SCPs) = 12

- **Output Indicators**

Number of SCPs in the final set selected for implementation = 4

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

1. Proportion of MS stating satisfaction with the toolboxes after 12 months

WHO Surgical Safety Checklist

**44 % of MS stating satisfaction with the toolbox after 12 months**

- Numerator: Number of MS stating satisfaction with the toolbox after 12 months = **4**
- Denominator: Number of MS participating in the implementation of SCPs and took part in the WP5 baseline and endline questioning = **9**

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

  - Medication Reconciliation

    - 56 % of MS stating satisfaction with the toolbox after 12 months**

    - Numerator: Number of MS stating satisfaction with the toolbox after 12 months = **5**
    - Denominator: Number of MS participating in the implementation of SCPs and took part in the WP5 baseline and endline questioning = **9**
      - As only those HCOs took part for 12 months.

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

Multimodal intervention to increase hand hygiene compliance

**50 % of MS stating satisfaction with the toolbox after 12 months**

- Numerator: Number of MS stating satisfaction with the toolbox after 12 months = **3**
- Denominator: Number of MS participating in the implementation of SCPs and took part in the WP5 baseline and endline questioning = **6**

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

  - Paediatric Early Warning Scores*

    - 50 % of MS stating satisfaction with the toolbox after 12 months**

    - Numerator: Number of MS stating satisfaction with the toolbox after 12 months = **1**
    - Denominator: Number of MS participating in the implementation of SCPs and took part in the WP5 baseline and endline questioning = **2**

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

2. Proportion of HCOs who have implemented SCPs after 12 months

**72 % of HCOs implemented the SCPs after 12 months (220/308)**

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

- 2a) WHO Surgical Safety Checklist (72%)

- Numerator: Number of HCOs who have implemented SCP1 after 12 months = 62
- Denominator: Number of HCOs signed up to implement SCP1 at the start of the project = 86

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

- 2b) Medication Reconciliation (90%)

- Numerator: Number of HCOs who have implemented SCP2 after 12 months = 95
- Denominator: Number of HCOs signed up to implement SCP2 at the start of the project = 106

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

2c) Multimodal intervention to increase hand hygiene compliance (59%)

- Numerator: Number of HCOs who have implemented SCP3 after 12 months = 48
- Denominator: Number of HCOs signed up to implement SCP3 at the start of the project = 81

## Objective 3: Patient Safety good practices implementation (WP5)

- Outcome Indicators

- 2d) *Paediatric Early Warning Scores (43%)*

- Numerator: Number of HCOs who have implemented SCP4 after 12 months = 15
- Denominator: Number of HCOs signed up to implement SCP4 at the start of the project = 35

## **Objective 4: Patient Safety good practice measurement (WP5)**

- **Process Indicators**

1) Number of Coordination meetings

1a) No of coordination meetings held

1b) No of participating organisations

## Objective 4: Patient Safety good practice measurement (WP5)

- Output Indicators

Number of entities that actually started using new systems (SCP, GOP, QMS)

- SCP WHO Surgical Safety Checklist: **13** HCOs out of 62 HCOs participating in the implementation and took part in the WP5 baseline and endline questionnaire **(21%)**
- SCP Medication Reconciliation: **46** HCOs out of 95 HCOs participating in the implementation and took part in the WP5 baseline and endline questionnaire **(48%)**

## Objective 4: Patient Safety good practice measurement (WP5)

- SCP Multimodal intervention to increase hand hygiene compliance: **10** HCOs out of 48 HCOs participating in the implementation and took part in the WP5 baseline and endline questionnaire **(21%)**
- SCP Paediatric Early Warning Scores: **9** HCOs out of 15 HCOs participating in the implementation and took part in the WP5 baseline and endline questionnaire **(60%)**
- → for all SCPs: **78 HCOs (13+46+10+9)**

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

- 1) Proportion of HCO that declare satisfaction from implementation

*WHO Surgical Safety Checklist*

**98 % of HCO declaring satisfaction from implementation**

- Numerator: no of HCO declaring satisfaction from implementation in the endline questioning = **61**
- Denominator: no of HCO participating in the implementation and took part in the WP5 baseline and endline questioning = **62**

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

  - Medication Reconciliation

    - 80 % of HCO declaring satisfaction from implementation**

    - Numerator: no of HCO declaring satisfaction from implementation in the endline questioning = **76**
    - Denominator: no of HCO participating in the implementation and took part in the WP5 baseline and endline questioning = **95**

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

Multimodal intervention to increase hand hygiene compliance

**98 % of HCO declaring satisfaction from implementation**

- Numerator: no of HCO declaring satisfaction from implementation in the endline questioning = **47**
- Denominator: no of HCO participating in the implementation and took part in the WP5 baseline and endline questioning = **48**

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

  - Paediatric Early Warning Scores*

    - 60 % of HCO declaring satisfaction from implementation**

    - Numerator: no of HCO declaring satisfaction from implementation in the endline questioning = **9**
    - Denominator: no of HCO participating in the implementation and took part in the WP5 baseline and endline questioning = **15**

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

**88 % of HCO declaring satisfaction from implementation (for all 4 implemented practices)**

- Numerator: no of HCO declaring satisfaction from implementation in the endline questioning = **193**
- Denominator: no of HCO participating in the implementation and took part in the WP5 baseline and endline questioning = **220**
- 88%

## Objective 4: Patient Safety good practice measurement (WP5)

- Outcome Indicators

2. Degree of participation of target groups and stakeholders

2a) % of **target** groups participating

- Numerator: no of target groups participating
- Denominator: no of target groups contacted

2b) % of **stakeholders** participating

- Numerator: no of stakeholders participating
- Denominator: no of stakeholders contacted

# Objective 5: Quality improvement systems exchange mechanism (WP6)

- Process Indicators

1. Development of questionnaire to identify QMS and GOP (data from WPL)

% of tasks done to develop WP6-Questionnaire1

- Numerator: no of tasks done to develop the questionnaire
- Denominator: no of tasks planned to develop the questionnaire

# Objective 5: Quality improvement systems exchange mechanism (WP6)

- Process Indicators

## 2. Coordination meetings

% of coordination meetings held (57%)

- Numerator: no of coordinator meetings held (11)
- Denominator: no of coordinator meetings planned (19)
  
- **September 2012**:  $23 * 100 / 24 = 95.83$  % (at least 1 of 2 meetings)
- **March 2013**:  $18 * 100 / 24 = 75$  % (at least 2 of 3 meetings)
- **Sept 2013**:  $18 * 100 / 24 = 75$  % (at least 2 of 3 meetings)
- **March 2014**:  $19 * 100 / 24 = 79.17$  % (at least 3 of 5 meetings)
- **Sept 2014**:  $20 * 100 / 24 = 83.3$  % (at least 3 of 6 meetings)

# Objective 5: Quality improvement systems exchange mechanism (WP6)

- Output Indicators

1. Technical reports delivered

% of GOP selected for EM

- Numerator: no of GOP identified and selected for exchange mechanism (according to agreed criteria)

- Denominator: n<sup>o</sup> of GOP identified though WP6-Questionnaire1

2. QMS and GOP identified

% of Technical Reports delivered

- Numerator: no of Technical Reports delivered (in the platform)

- Denominator: no of Technical Reports planned (in the work plan)

# Objective 5: Quality improvement systems exchange mechanism (WP6)

- Outcome Indicators

1. % of GOP considered transferable

- Numerator: no of GOP selected and considered transferable = 10

- Denominator: no of GOP selected according to agreed criteria = 32

2. % of MS satisfied with the EM Numerator: no of MS participating in the EM and satisfied

- Denominator: no of MS participating in the EM

# Objective 6: Patient Safety and Quality Network sustainability (WP1-7)

- Process Indicators

Completion of the PaSQ network

% of Member States and EU stakeholders having nominated a contact person for PaSQ

- Numerator: no of contact persons

- Denominator: no of Member States & EU stakeholder organisations

# Objective 6: Patient Safety and Quality Network sustainability (WP1-7)

## • Output Indicators

1. PaSQ **NCPs** and stakeholder feedback  
(feedback = fulfilled questionnaire)

**25% of feedback received**

- Numerator: n° of feedback received (7)
- Denominator: n° of PaSQ NCPs & EU stakeholders participating to the network (28)

2. Consistency of the proposal with needs expressed by PaSQ NCPs & stakeholders

% overlap : types/structure of needs expressed vs. types/structure of needs in proposal

# **Objective 6: Patient Safety and Quality** **Network sustainability (WP1-7)**

- **Outcome Indicators**

1. % of NCPs participating to the data collection activities of network
- Numerator: no of PaSQ NCPs and Stakeholders having filled all questionnaires
  - Denominator: no of PaSQ NCPs and Stakeholders participating to the Network

## Objective 6: Patient Safety and Quality Network sustainability (WP1-7)

2. Number of PaSQ NCPs and EU Stakeholders supporting the proposal for the future development of the network

% of PaSQ NCPs and EU Stakeholders supporting the proposal for the future development of the network

- Numerator: no of PaSQ NCPs and EU Stakeholders supporting the proposal
- Denominator: no of PaSQ NCPs and EU Stakeholders participating to the Network

# Feedback from NCPs



1. Overall, was the PaSQ exchange mechanism an added value for health professionals, healthcare organizations, health authorities, stakeholders, patients?

- All responders were very positive
- PaSQ Exchange Mechanism is an added value
- PaSQ EM should be sustained to continue to benefit all EU interested bodies and stakeholders
- Expansion of its activity will be of additional value.

2. *What is your opinion about the implementation of best practices undertaken in the frame of PaSQ in Member States?*

- Agreement about the beneficial impact for the participants in the implementation of SCPs
- **Transferability is a key issue** and should be dealt to maximize beneficial effects.

3. *Should national authorities be more actively involved?*

- **Responses varied** due to the diversity that was experienced in various EU Member States.
- The role of national authorities is critical
- Their participation needs to be strengthened
- Future steps for sustaining PaSQ platform need to incorporate actions for a **more active involvement of national health authorities.**

4. Should *scientific bodies and other stakeholders* be more *actively engaged* in relevant future efforts? In which way and what for?

- Scientific bodies can play an important role in:
  - supporting current efforts
  - channelling new research results for implementation in HCOs.

However, as long as PaSQ aim is not research-oriented, the “non scientific” *stakeholders should lead the way* forward.

5. *Do you consider that the range of SCPs and GOPs was broad enough and adequate? Was the assessment of those best practices satisfactorily detailed?*

- The **range was surely broad** enough
- **Some overlaps** were identified
- The criteria for categorization should be clearer
- **Further elaboration** is quite feasible and needed.

6. *Do you consider that issues of transferability among Member States were adequately explored?*

- Transfer of clinical or organizational practices from one HCO to another (even within the same country) is a well recognized issue
- **Transferability is of great interest and concern**
- More work should be done to tackle transferability
- It is **not considered as a limitation** of PaSQ approach

7. Has *PaSQ website* played its role and met needs and expectations of all those seeking relevant information? Do you believe that it was interactive enough? Any other functions of the website that you believe would be useful?

- PaSQ website played perfectly its **pivotal role**
  - “co-ordinating” actions
  - facilitating dissemination and promotion of PaSQ network
- It needs to **continue in any future platform**

8. Do you consider the role and **contribution of NCPs** was as expected or required? If not, what was missing? What else could have been done?

- The role of NCPs is of utmost importance
- The role of NCPs is **highly variable** in all PaSQ activities.
- A **more systematic** and “homogeneous performance” would be preferred to effectively **sustain a future PaSQ platform.**

9. Do you believe that *stakeholders, NCPs or patients*, should in future be more *actively involved* in the formulation of strategies, methods and selection of new improvement systems?

- Unanimously it is agreed that everyone should more **actively participate and contribute in any future action.**

# Thank you

**for your attention and  
especially your patience**

