Work Package 6

Policies for prevention of health-care-associated infections and their implementation

WP leader: 6.1 Hellenic Center for Disease Control and Prevention
6.2 Public Health Agency of Sweden
WP objectives

6.1 Promoting a top-down approach for preventing HCAI through the implementation of agreed infection control programs and institutional behavior change

6.2 Promoting a bottom-up approach from clinical practice to policy level by implementing evidence-based guidelines using an established implementation model
Work Package n° 6.1: Policies for prevention HAIs and their implementation

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Head of HAIs and AMR Office
Hellenic Center for Disease Control & Prevention HCDCP
WP objectives

Work description, progress and achievements towards WP objectives

Timeline: Tasks, Deliverables & Milestones status

Stakeholders involvement

Risks encountered

Next steps for Year 2
WP.6.1 objectives

Objective 6.1: Top-down approach → Policies to prevent HAIs through agreed ICP implementation & institutional behavior change

Task 6.1.1: Determine the necessary institutional structures & resources for an effective ICP implementation and promote adequate hospital organization & management, in accordance to WHO and ECDC recommendations.

Activity 6.1.1.1: Survey A → Survey related to key components of ICP, based on WHO & ECDC guidelines.
Aim: the clearest picture of the reality for each country’s capability to ICP implementation

Activity 6.1.1.2: Review of guidelines for an ICP implementation based on Survey’s A results

Activity 6.1.1.3: Assessment of cost benefit analysis for an ICP implementation
WP.6.1 objectives

Objective 6.1: Top-down approach → Policies to prevent HAIs through agreed ICP implementation & institutional behavior change

Task 6.1.2: Incorporation of ICP to clinical practice using institutional behavioral change, to increase HCWs’ compliance, Aim: fill the gap between policy & practice of ICP and evaluate the impact of this change

Activity 6.1.2.1: Survey B → Survey related to barriers for an effective ICP implementation, linked to institutional policy & organizational behavior

Activity 6.1.2.2: Universal Infection Control Framework → roles, priorities & necessary interventions, based on the results of Survey A & B

Activity 6.1.2.3: Pilot testing of UICF → estimate the impact on routine clinical practice & behavioral change
WP.6.1 objectives

**Objective 6.1**: Top-down approach $\rightarrow$ Policies to prevent HAIs through agreed ICP implementation & institutional behavior change

**Task 6.1.3**: Development of tools to increase awareness & improve HCW’s training in ICP, web-based, based on the results of Survey A & B
PROGRAMME PHASES

PHASE 1.
SURVEYS A & B

PHASE 2.
UNIVERSAL FRAMEWORK FOR IC TOOLS - COST BENEFIT ASSESSMENT

PHASE 3.
IMPLEMENTATION, EVALUATION

D.1
D.2
Work description and progress towards WP objectives for each task.

After the proposals and the comments we received from all the partners the final version of questionnaires were uploaded on ShareFile of EU-JAMRAI.

Surveys A and B documents include:
1. The scope of survey
2. The methodology
3. The questionnaires

Additionally a document was uploaded with the login process and the Call to Action invitation.
The development of the digital platform for the Surveys

**January 2018.** Development of a digital multilingual platform that gives access to the survey material, especially the online completion of the questionnaires (by leading team) [http://www.eujamrai-icpsurveys.eu](http://www.eujamrai-icpsurveys.eu)

**February - May 2018.** The English version of questionnaires were translated by the partners to the language of their country (French, Spanish, Portuguese, Italian, Austrian, English and Greek). The leading team formulated the final translated questionnaires of both surveys (3 questionnaires per survey) and uploaded them to the platform. 42 questionnaires were uploaded during this period.

For each country there were four single access codes for the target groups of surveys (Public Health Officers, Hospital Administrators, Infection Control Committees and Healthcare Professionals).
The development of the digital platform for the Surveys

42 questionnaires were uploaded in 7 European languages
Activity 6.1.1.1: Survey A

- Based on the key components of an ICP of recent guidelines by WHO
- Domains examined: IC policy implementation at national and hospital level, Institutional bodies dedicated to IC, HAI surveillance, Training & Guidelines, audit, Communication & cooperation procedures.
- Disseminated to ICCs, HA, PHA
SURVEY A. Participation

519 completed questionnaires (ICC=335, HA=161, PHA=23)
PHA: 8 countries (Austria, Denmark, Italy, France, Greece, Portugal, Spain & the Netherlands)
HA and ICCs: 5 countries (Italy, France, Greece, Portugal, Spain)
In the majority of hospitals, the basic structures and procedures exist and are functional. More specifically:

1. **A national policy** on the prevention of HAIs with specific objectives exist, to whose progress Public Health Authorities and Governments are regularly updated.

2. **Infection Control Programs** at hospital level have been put into practice with specific objectives.

3. **Competent bodies**, such as the Infections Control Committees, have been formed and have undertaken the task of monitoring the implementation of Infection Control Programs.

4. **HAI Surveillance Systems** have been developed at national level in which the majority of hospitals participate.

5. **Training programs** about Infection Control for Health Professionals have been implemented.
The areas found with gaps in their implementation mainly concern the following:

1. The active involvement of hospital hierarchy (HA and CDH responsible for Infection Control).
2. Feedback on national and hospital policies should be given to all stakeholders as well as feedback on surveillance and audit results.
3. Strengthening of hospitals with financial and human resources, including qualified personnel with exclusive employment in Infection Control, at the very least.
4. The establishment of collaboration procedures among the stakeholders so as the implementation of both local and national policies on Infection Control becomes feasible.
1st deliverable

REVISED GUIDELINES FOR THE IMPLEMENTATION OF INFECTION CONTROL PROGRAM IN HEALTHCARE SETTINGS
D.6.1.1
Activity 6.1.2.1: Survey B

- Based on Health Belief Model
- Domains examined: Susceptibility, Severity, Benefits, Barriers, Cues to action
- Disseminated to ICCs, HA, HCWs
SURVEY B. PARTICIPATION

Respondents in Survey B

2131 completed questionnaires (ICCs=411, HAs=147, HCWs=1573) from 6 countries (Austria, Italy, France, Greece, Portugal, Spain)
RESULTS OF SURVEY B
MS30

Barriers of the implementation an effective ICP which are linked to Institutional Policy and Organizational Behaviour

Leader: Hellenic Center for Disease Control and Prevention- HCDCP

On behalf of the Hellenic leading team:
Authors: Flora Kontopidou, Mariana Tsana
SURVEY B. Findings and Areas of Improvement

**DOMAINS**

**AUTHORITIES & ROLES**

ICCs’ duties have to be determined as also their authorities and their framework. Hierarchy’s role of clinical departments is essential. HAs’ responsibility for the ICP implementation

**SAFETY**

Collaborations, teamwork, appropriate training and the management of errors. Survey’s outcomes show that significant improvements could be achieved in this field.

**RISK MANAGEMENT**

HCWs’ & ICCs’ awareness is quite substantial and this is a promising message. HAs seem to be awarded, but there is a gap to their knowledge for crucial importance issues

**AWARENESS**

HAs: training on multiple levels, ICCs: specialised & certified training of their members

**TRAINING- GUIDELINES**

Supervisors: training on their role in IC measures compliance,

**LEADERSHIP**

Healthcare Professionals: training on the basic IC measures, particularly the new HCWs

**RESOURCES**

HAs should take the leading role of ICP implementation.

**SURVEILLANCE- AUDIT**

The minimum necessary resources for ICP implementation should be provided by hospital’s budget.

The clinical impact of the surveillance data

Feasible applications and tools for audit implementation in clinical practice
Which of the following measures do you consider as important steps for the improvement of the ICP implementation in your hospital?

<table>
<thead>
<tr>
<th>HCW</th>
<th>ICC</th>
<th>HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical National Guidelines</td>
<td>Practical National Guidelines</td>
<td>Practical National Guidelines</td>
</tr>
<tr>
<td>HCWs Training Improvement</td>
<td>HCWs Training Improvement</td>
<td>Institutional Framework / Roles And Authorities</td>
</tr>
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<td>Institutional Framework / Roles And Authorities</td>
<td>HCWs Training Improvement</td>
</tr>
<tr>
<td>Resources/Cost Assessment</td>
<td>Resources/Cost Assessment</td>
<td>Resources/Cost Assessment</td>
</tr>
<tr>
<td>Support ICC &amp; IC Nurse Role</td>
<td>Support ICC &amp; IC Nurse Role</td>
<td>Surveillance - Feedback Improvement</td>
</tr>
<tr>
<td>Support from PHA</td>
<td>Support from PHA</td>
<td>Evaluation Of Interventions</td>
</tr>
<tr>
<td>Evaluation Of Interventions</td>
<td>Evaluation Of Interventions</td>
<td>Support ICC &amp; IC Nurse Role</td>
</tr>
<tr>
<td>Surveillance - Feedback Improvement</td>
<td>Surveillance - Feedback Improvement</td>
<td>Support from PHA</td>
</tr>
</tbody>
</table>
The initial statement of WP.6.1 was:
There is a gap between recommendations and clinical practice

Survey A: the gap between PHA and ICCs
Survey B: the gap between HA and ICCs/HCWs
Timeline: Tasks, Deliverables & Milestones status

Please fill the timeline and specify if the status of each task is: Ahead schedule / On schedule / Achieved / Delayed
Please mark and give an update for the Deliverables and Milestones for your WP (Below the example for WP1)
Status of the Stakeholders

1. Health First Europe
2. HOPE (European Hospital and Health Care Federation)
3. 12 European countries - EUJAMRAI partners
### Risks encountered

#### Risks Foreseen risks from the description of Work

<table>
<thead>
<tr>
<th>Risk n°</th>
<th>Description of risk</th>
<th>Proposed risk mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>There was not the expected response from non-partners countries and other stakeholders as it was expected. A possible explanation for this could be the fact that there were many surveys simultaneously in the first year of the project.</td>
<td>Improvement of the monitoring of the activities between WPs. Better cooperation with stakeholders and other parties</td>
</tr>
<tr>
<td>2.</td>
<td>Deadlines were not always respected from all the partners and additionally there was not a simultaneous participation from all countries to the surveys.</td>
<td>Improvement of the monitoring of the activities</td>
</tr>
</tbody>
</table>

#### Unforeseen Risks

<table>
<thead>
<tr>
<th>Risk n°</th>
<th>Description of risk</th>
<th>Proposed risk mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The project is very demanding and delays expected from all of the parties</td>
<td>Improvement of the monitoring of the activities</td>
</tr>
</tbody>
</table>
Next steps for year 2

Activity 6.1.2.2: Universal Infection Control Framework → roles, priorities & necessary interventions, based on the results of Survey A & B

Activity 6.1.1.3: Assessment of cost benefit analysis for an ICP implementation

Task 6.1.3: Development of tools to increase awareness & improve HCW’s training in ICP, web-based, based on the results of Survey A & B

Activity 6.1.2.3: Pilot testing of UICF → estimate the impact on routine clinical practice & behavioral change
## WP6.1.1 PARTICIPATING PARTNERS

<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>ORGANIZATION NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA</td>
<td>GOG</td>
</tr>
<tr>
<td>FRANCE</td>
<td>SPF</td>
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<tr>
<td>GREECE</td>
<td>INSERM</td>
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<td></td>
<td>HCDCP - 7HC</td>
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<tr>
<td>ITALY</td>
<td>UNIFG</td>
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<td>ISS</td>
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<td>PORTUGAL</td>
<td>DGS</td>
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<td>AEMPS</td>
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<td>SAS</td>
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<td>ISCIII</td>
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<td></td>
<td>SERMAS</td>
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</tbody>
</table>
Thank you!

Flora Kontopidou

* This presentation arises from the Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections (EU-JAMRAI), which has received funding from the European Union, under the framework of the Health Program (2014-2020) under the Grant Agreement N° 761296. Sole responsibility lies with the author and the Consumers, Health, Agriculture and Food Executive Agency is not responsible for any use that may be made of the information contained herein.
Work Package 6.2
Policies for prevention of health-care-associated infections and their implementation

6.2 Public Health Agency of Sweden
WP 6.2 objective

Promoting a bottom-up approach from clinical practice to policy level by implementing evidence-based guidelines using an established implementation model.
WP 6.2 tasks and participants

Work description, progress and achievements towards WP objectives

Timeline: Tasks, Deliverables & Milestones status

Stakeholders involvement

Risks encountered

Next steps for Year 2
WP tasks and participants

6.2.1 Introduce an evidence-based implementation model
Belgium - FPS HFCSE
Czech Republic - NIPH
Estonia - TA
Latvia - PSKUS
Lithuania - LSMULKK, VULSK, HI,NVSC
Netherlands - VWS
Slovenia - NIJZ
Sweden - FoHM, SOS, UAS

6.2.2 Promote implementation of similar routines in non-EU countries in Europe
Georgia
Moldova
Ukraine
Background

Viscous circle HCAI - AMR relation

Antibiotic resistance → Transmission between patients → HCAI

Antibiotic usage → HCAI

Infection Prevention and Control is a tool to reduce the spread of AMR
Task 6.2.1 Introduce an evidence-based implementation model - the Breakthrough Series Model

Key elements

- Topic selection
- Faculty recruitment
- Enroll participants
- Learning sessions
- Action periods
Work description, progress and achievements towards WP objectives

Reduce CAUTI

Reduce catheter-days

Reduce new catheterizations

Bundles for CAUTI prevention

- Avoid unnecessary urinary catheters
- Closed collection system
- Catheters as small size as possible
- Insertion - aseptic technique
- Maintenance - aseptic technique and avoid unnessessary manipulation
- Review urinary catheter necessity daily and remove promptly if not indicated
Work description, progress and achievements towards WP objectives

Ward survey → PDSA → Routine
Time line - National work

Work in the units/wards
Process support - via mail, phone, visits, web meetings

- Enroll hospitals, units, teams
- Kick off
- Workshop 1
- Workshop 2
- Workshop 3
- Dissemination seminar

Spring 2018          Fall 2018          Winter 2019          Spring 2019          Summer/fall 2019
Timeline: Tasks, Deliverables & Milestones status

Task 6.2.1 Introduce an evidence-based implementation model
-On schedule

Task 6.2.2 Promote similar routines in non-EU countries in Europe
-On schedule

Phase 1: Prework

Phase 2: Pilot

Milestone (M12)
Topic and hospitals per country selected

Phase 1:
- Sept. 17
- Oct. 17
- Nov. 17
- Dec. 17
- Jan. 18
- Feb. 18
- Mar. 18
- Apr. 18
- May 18
- June 18
- July 18
- Aug. 18
- Sep. 18
- Oct. 18

Phase 2:
- Nov. 17
- Dec. 17
- Jan. 18
- Feb. 18
- Mar. 18
- Apr. 18
- May 18
- June 18
- July 18
- Aug. 18
- Sep. 18
- Oct. 18
Stakeholders Involvement

WP6.2 partners are national authorities/ institutions with national responsibilities within the infection control area.

Examples of stakeholders involved:
HCW, IPC units/-responsible staff Hospital/ward management
Patient safety staff
Quality improvement staff
Societies/associations for IPC professionals
University hospitals
European Parliament
Public health/healthcare/social authorities
Ministry of Health
Ministry of Social affairs
### Risks encountered

<table>
<thead>
<tr>
<th>Description of risk</th>
<th>Proposed risk mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives and tasks for WP 6 might be too ambitious and might run the risk of not being manageable within the time and resources allocated</td>
<td>Actions within this WP focus on supporting implementation and setting realistic goals</td>
</tr>
<tr>
<td>Difficulties in having hospitals joining action</td>
<td>Good preparatory work and contacts in order to explain the actions and also the added value of these actions</td>
</tr>
<tr>
<td>Time constraints</td>
<td>Realistic time schedule and regularly monitor progress</td>
</tr>
</tbody>
</table>
Next steps for year 2

Phase 2: Pilot
Phase 3: Expansion - new wards
D6.3 Report on experience from country teams of introducing and working with the implementation model M18
Lotta Edman

Co-funded by the Health Programme of the European Union

Folkhälsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN

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