



Joint Action
Antimicrobial Resistance and
Healthcare-Associated Infections

4.1

Integration plan and sustainability strategy

WP4 | Integration into national policies and sustainability

Leader acronym | MoH-FR

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LIST OF ACRONYMS

AC: advisory Committee

AMR: Antimicrobial Resistance

ECDC: European Centre for Disease Prevention and Control

EU: European Union

HCAI: Healthcare-Associated Infections

IPC: Infection Prevention and Control

JA: Joint Action

EU-JAMRAI: European Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections

MoH-FR: French Ministry of Solidarity and Health

MS: Members States

NAPs: National Action Plans

SH: Stakeholders

WP: Work Package

1.CONTEXT AND OBJECTIVES

1.1. The objectives of this integration plan and sustainability strategy

The overall aim of the European Joint Action (JA) on antimicrobial resistance and healthcare-associated infections (EU-JAMRAI) is to support EU Member States develop and implement effective one health action plans against antimicrobial resistance (AMR) and Healthcare associated infections (HCAI).

The overarching task of EU-JAMRAI work package (WP) 4 is to foster the integration into national policies of the recommendations issued by the consortium and encourage healthcare workers, policy makers as well as other key actors to expand and maintain their implementation in their respective countries when and where needed. Several actions need to be maintained beyond the 3-year JA duration to ensure sustainability of results and actions initiated during the JA. In addition, the uptake of key outcomes of the EU-JAMRAI by some if not all Member States is a criterion of success for the JA. Hence, the first task of WP4 consists of designing an integration and sustainability strategy and plan based on the expected outputs from the JA. The strategy will take into account potential differences in identified priorities between countries, and also define potential indicators and targets for the follow-up of the selected actions. As tackling AMR and HCAI implies a multilevel, multi-actor and multi-sectoral approach, the WP4 will provide tailored recommendations to EU-JAMRAI partners as well as targeted groups of stakeholders, each associated with clear and measurable goals.

Therefore, the present document details the integration plan and sustainability strategy.

1.2. Definitions of the terms “integration” and “sustainability”

Integration plan: it refers to the strategy for uptake and integration of relevant EU-JAMRAI outputs into member states (MS) national health policy. A needs assessment of each MS is performed as a first step. The EU-JAMRAI deliverables that match these needs, based on their expected benefit, are then selected. The integration plan aims thus at ensuring a smooth uptake of the JA outputs at member states’ level (national, local, regional) into, for example, AMR national policies (NAP), specific national actions or programmes, by different actors (government, professional organisations...).

Sustainability strategy: this is the strategy defining which EU-JAMRAI elements/deliverables/results will be further developed, consolidated or run once the EU-JAMRAI EC grant will come to an end, and by which entity/organisation this will/should be done. There are two main ways to ensure sustainability: keep alive

the network and cooperation between MS and/or continue an action at EU level, when and if necessary.

Our first step was therefore to identify the priority measures to work on that should be maintained beyond the JA's term.

2. SPECIFIC MEASURES FOR PREVENTION AND CONTROL OF AMR AND HAI TO BE INTEGRATED IN NATIONAL ACTION PLANS AND SUSTAINED BEYOND THE JA

2.1. Selection method of the measures

In order to identify the specific measures for prevention and control of AMR and HCAI to be integrated in national action plans and sustained beyond the EU-JAMRAI duration, the WP4 leaders launched a survey among Member States and Stakeholders to explore their priorities. In parallel, WP4 leaders consulted all other WP leaders regarding their work and how deliverables produced in their respective WPs could address these priorities and which ones should be maintained after the JA ends.

Survey (Milestone 4.1) of Member States and Stakeholders' priorities

This Milestone (Milestone MS4.1) is part of the task 4.1 to build the integration plan and sustainability strategy. The main goal was to identify priority actions that were viewed by Members States (MS) and stakeholders (SH) as most relevant to tackle AMR and to control HCAI. For this purpose, a survey entitled "Survey of members States and Stakeholders' priorities" was sent to the Advisory Committee (AC) and stakeholders forum (SH) members.

Among the SH involved in the JA, 75% (27/36) provided feedback to the survey. Among AC members, 76% (19/25) participated.

The survey report is available on both EU-JAMRAI secured area "Sharefile" and [public website](#). For the purpose of this Strategy, the main conclusions and opportunities identified were the following:

- The vast majority of countries who participated in the survey have a national action plan (NAP) on AMR, that follows a One Health approach and also includes actions or strategies on control of HCAI.
- For both AC members and SH, there are priority measures required in all domains: infection prevention and control, surveillance, antibiotic stewardship, research and development, communication and awareness.
- Keeping AMR high on the political agenda is the most important element identified by both groups of respondents to maintain a fruitful cooperation on

the fight on AMR. Using the Knoster model, resources and skills are the most urgent targets to work on for sustainable change at local, national and European levels.

- The results of this survey will be considered in conjunction with deliverables from the other WPs to help define priority actions for the integration plan and the sustainability strategy of the EU-JAMRAI.

Continuous review of deliverables and regular interviews with the EU-JAMRAI WP' leaders

From M1 to M14, *a priori* assessment for each deliverable described in the grant agreement was performed by the WP4: type of measure (practical tools, guidelines), evaluation of each deliverable from an integration and sustainability perspective. WP4 conducted the following actions : (1) Analysis of deliverables planned in each EU-JAMRAI WP, to *a priori* identify their potential for entering the integration and sustainability process, (2) classification of deliverables according to their perceived integration and sustainability potential beyond the end of the JA duration, suitable level(s) of action - regional, national, European), Knoster model categories. This analysis was submitted on September 27th 2018 to all WP leaders to collect their input on their own WP's deliverables.

In parallel and as a continuous process in the months that followed, the WP4 analysed the main deliverables and discussed with the relevant WP leaders, in order to select specific measures for prevention and control of AMR and HCAI to be integrated in NAPs and sustained beyond the JA. The agenda of the discussions and the targeted deliverables are specified in Annex I.

This selection process has also carefully taken into account the 2017 European AMR Action Plan and the Council Conclusions (14 June 2019).

All this extensive work led us to the identification, in close synergy with the WP leaders, the AC and SH members, of 24 specific measures for prevention and control of AMR and HCAI to be integrated in NAPs and sustained beyond the end of the JA. The process is of course still ongoing.

Furthermore, the AC members have been consulted, in order to obtain their input on major deliverables. Indeed, on 22/07/2019, the AC chairperson sent these deliverables accompanied with a list of questions prepared by the EU-JAMRAI coordination team and WP4 with an integration and sustainability perspective. No comments were however received.

2.2. Validation method

The selection of relevant measures, which will be included in the integration plan and the sustainability strategy, have already undergone several validation steps.

First, the results of the survey (Milestone 4.1) on Members States and Stakeholders' priorities, were analysed and considered by the WP leaders, so that they could take it into account for their work and help us identify key integration and sustainability measures.

Second, the WP4 team organised a workshop at M24 (16th September 2019) in Rome following the second general assembly, to present to a large assembly (both AC and SH) the measures that have been selected so far (Milestone 4.2). According to the grant agreement, the workshop was intended for AC members. The SH and WP leaders were however invited as well. The objectives of this workshop were to: (1) Get feedback on the priority concrete actions that were selected so far, and suggestions for further actions, (2) Obtain commitment to help implement at regional/national/European level these actions, and (3) Validate together the next steps.

Before the workshop, the document presenting the selected measures and the objectives of the meeting was submitted to the WP leaders for suggestions and validation, as well as to the DG-Santé officer, CHAFEA and ECDC for information. Once validated, it was sent to the AC members and SH one week before the workshop.

During the workshop, all participants were invited to comment on all slides, in particular on: the choice of the selected measures, the outline of the integration and sustainability strategy for each measure (suggested pilot(s), type and level of action...). They were also invited to suggest additional measures. The measures that we had selected have all been approved during the meeting.

Following the workshop, the presentation was made available on Sharefile and also distributed by e-mail to the SH. They were invited to position themselves on the actions in which they wish to participate and were given one month to reply. We have received only two replies so far (mid-December 2019).

Annex II presents the number and the profile of workshop participants.

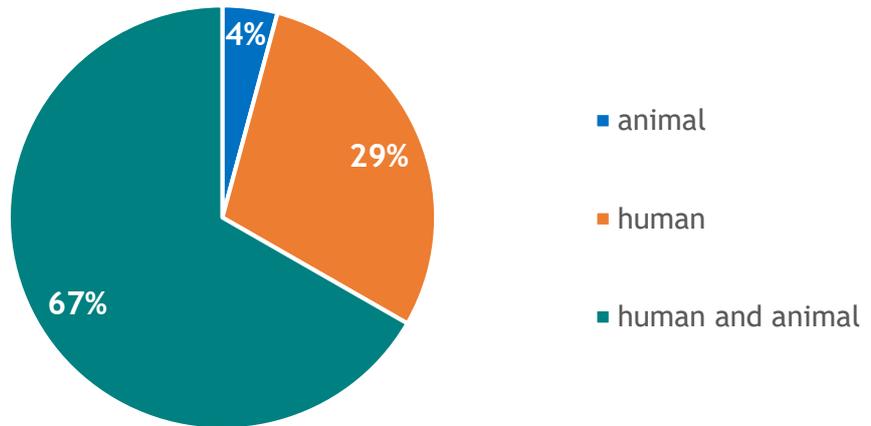
2.3. Presentation of the selected measures

Covering each domain of the WHO Global Action Plan and in line with the EU Action plan, 24 concrete measures have been identified so far, divided into 7 themes:

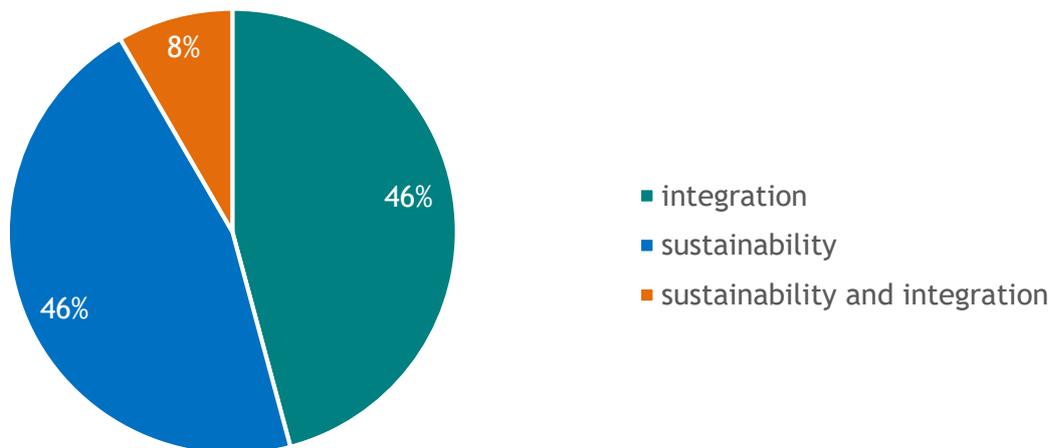
| Themes | Number of actions |
|-----------------------------|-------------------|
| Generic actions | 2 |
| Communication and awareness | 4 |
| IPC | 4 |
| Stewardship | 5 |
| Surveillance | 3 |
| One Health and NAP | 2 |
| Research and innovation | 4 |
| TOTAL | 24 |

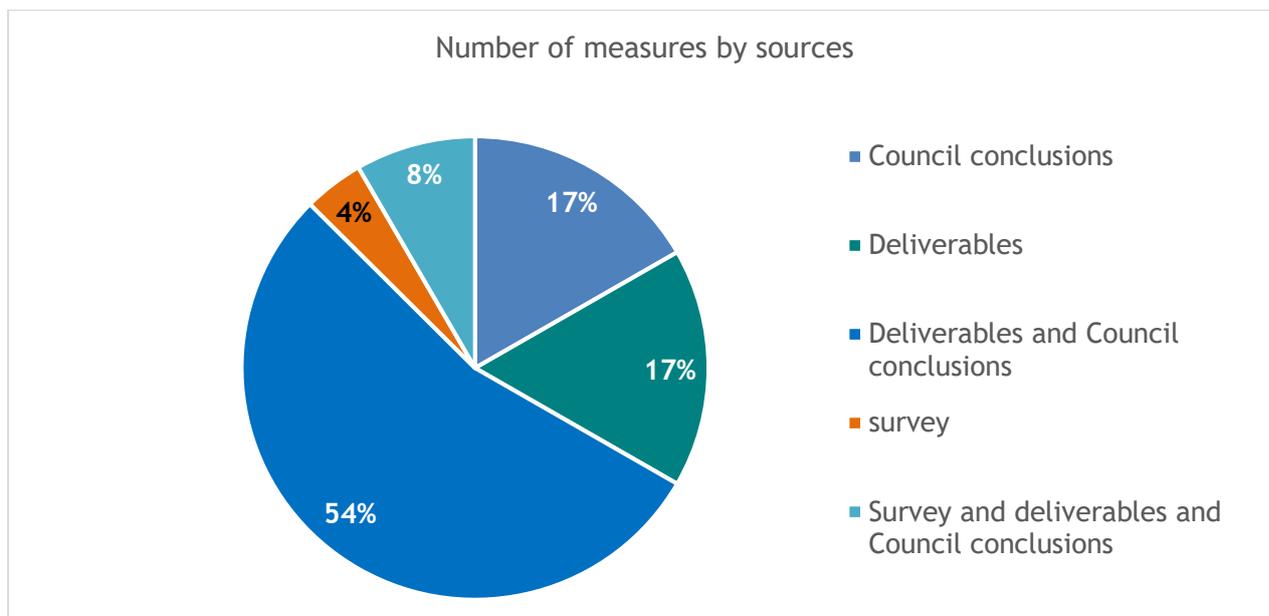
For each measure, we provided a definition and we specified which deliverables, section of the Council Conclusions (June 2019) and of the EU action plan the measure refers to. The concept of *One Health* was also highlighted, by identifying the target sectors (human health and/or animal health).

Number of measures by sector



Number of "sustainable" and / or "integrable" measures





Annex III describes all concrete measures that were discussed during the 2019 workshop.

Of course, these measures may evolve according to the future work of the JA. Most deliverables are indeed expected between months 27 and 36. For this reason, we have designed an ongoing process allowing us to consult SH and AC members on the deliverables to come (Cf. section 2.2); regular discussions with WP leaders will be organised as needed.

Once this step of selection of priority measures will be finalised, our work will focus on:

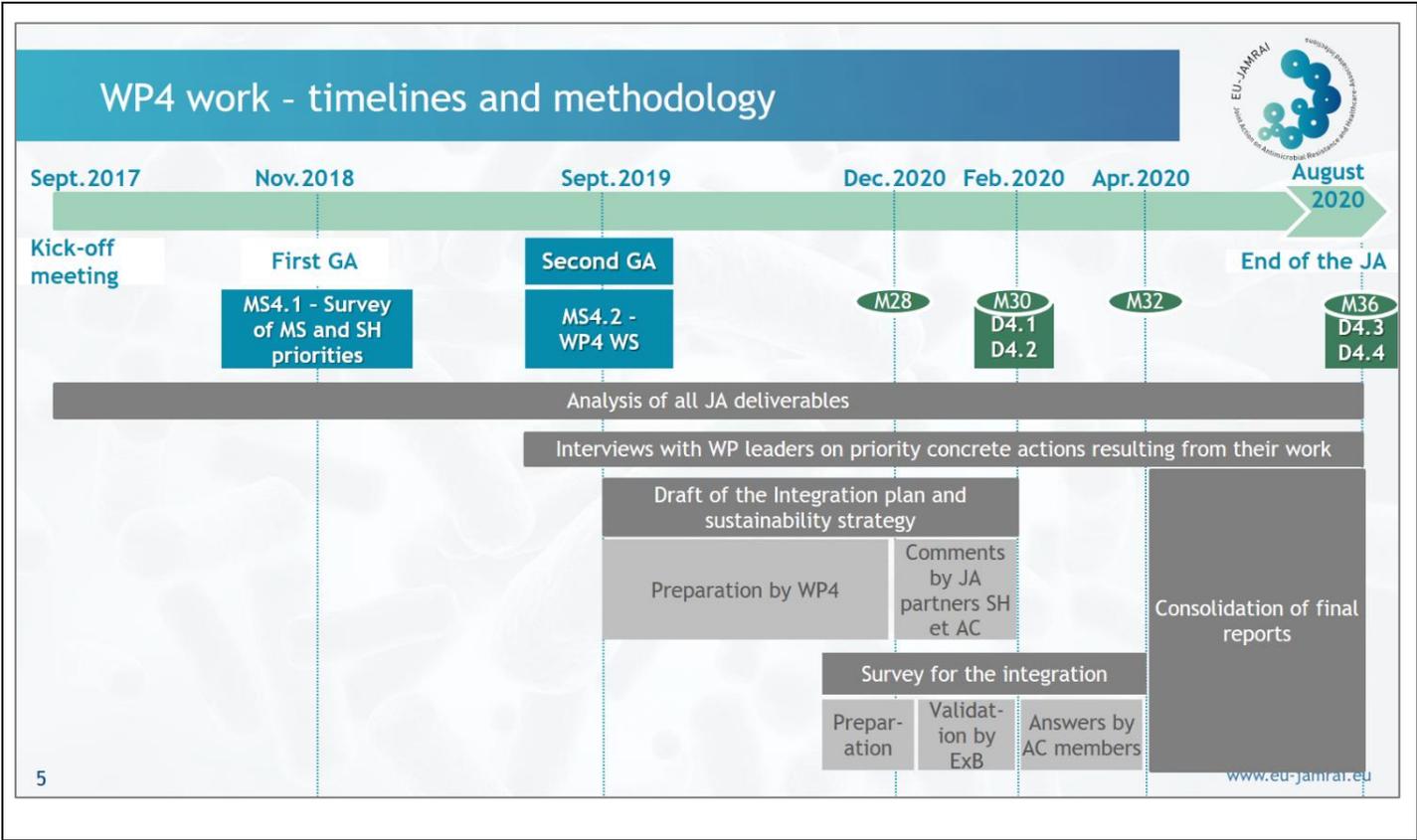
- Identifying relevant pilots: so far, WP4 leaders have identified potential pilots, discussed during the workshop. The work to be done now is to get in touch with these pilots, get their agreement and start working together on a detailed implementation plan of the measure;
- Writing detailed action plans for each measure (D4.2 integration plan and D4.3 sustainability plan) with the identified pilots.

Action plan for each measure: structured outline

- | | |
|---|--|
| <ul style="list-style-type: none"> • Title / Integration or Sustainability • Description of the work to be performed • Based on | <ul style="list-style-type: none"> • Pilot(s) • Partners • How • Monitoring and Evaluation Indicators • Timelines |
|---|--|

3. UPCOMING WORK, TIMELINE AND CONTRIBUTORS

The overview of our work programme, presented in September 2019, was as follows (it has been slightly modified since):



For each measure, we have started contacting the organisations identified as ‘lead’ or ‘pilots’, to discuss the practical implementation plan.

A survey on the integration will be designed and submitted to the AC members (MS representatives) in 2020, in collaboration with the WP3 team. The aim is to know which outputs of the JA they already have integrated / or planned to integrate in their NAPs.

As already mentioned, all deliverables to come will be submitted to the SH and the AC members, in collaboration with the WP3 team, with specific questions asking about integration and sustainability.

Of course, regular discussions on the upcoming deliverables will be planned, when relevant, with the WP leaders.

4. INTEGRATION PLAN AND SUSTAINABILITY STRATEGY: VALIDATION METHOD

This integration plan and sustainability strategy report is written by the WP4. This draft will be open between mid-December 2019 and mid-January 2020, in order to get comments, from the Executive Board members, the SH and the AC members. An e-mail will be sent to all.

From mid-January to mid-February 2020, the WP4 team will analyse the received input and finalise this report, to be published by the end of February 2020, as planned (M30).

Annex I: Regular discussions with WP leaders on their own main deliverables

Discussions that have taken place:

| WP N° | Leader acronym | Meeting date | Deliverables discussed |
|-------|----------------|---------------------------|--|
| 8 | AEMPS | 17/06/2019 | D8.1 Awareness and Communication Plan (M10) |
| 6 | NOPH | 15/07/2019 | D6.1 Revised guidelines for the implementation of infection control programs in healthcare settings (M14) + published Milestones |
| 7 | FHI/AEMPS | 19/07/2019 and 19/08/2019 | D7.2 Report on workshop of models for implementation of stewardship tools (M16) + Task 7.4.2 |
| 5 | VWS | 22/08/2019 | Discussion on their ongoing work |
| 9 | INSERM / FHI | 23/0/2019 | Discussion on their ongoing work |

Discussions to plan in the coming months:

| Del N° | Deliverable Name | WP N° | Leader acronym | Grant Agreement Calendar Month |
|--------|---|-------|----------------|--------------------------------|
| D8.3 | European competition with High Schools students | 8 | AEMPS | M32 |
| D2.2 | Layman report | 2 | AEMPS | M33 |
| D9.1 | Publication of research priorities identified as gaps | 9 | INSERM | M34 |
| D8.4 | Awareness and Communication High Level Meeting | 8 | AEMPS | M34 |
| D5.2 | Summary Country-to-country assessments | 5 | VWS | M36 |
| D5.3 | Overview enforcement and recommendations to be presented to the One Health Network | 5 | VWS | M36 |
| D6.2 | A Universal Infection Control framework with specific roles, priorities, resources and interventions for the implementation of an infection control plan in healthcare settings | 6 | NOPH | M36 |

| | | | | |
|------|---|---|--------------|-----|
| D6.4 | Update Report on experience from country teams of introducing and working with the implementation model | 6 | FOHM | M36 |
| D6.5 | Experience from non-EU country teams of introducing implementation model | 6 | FOHM | M36 |
| | | | | |
| D7.3 | Indicators used for monitoring antibiotic use and resistance in humans and animals | 7 | FHI/AEMPS | M36 |
| D7.4 | Surveillance of antimicrobial use and resistance in human | 7 | SAS/AEMPS | M36 |
| D7.5 | Surveillance of antimicrobial resistance in bacteria from diseased animals | 7 | ANSES | M36 |
| D9.2 | Implementation strategy for EU collaboration | 9 | FHI | M36 |
| D9.3 | Development of guidelines for incorporating evidence into policies | 9 | INSERM / FHI | M36 |

Annex II: Number and categories of workshop participants

Summary

| Type of participant | Number | % |
|---|-----------|--------------|
| Advisory Committee participant | 5 | 11 % |
| Partner - Advisory Committee participant | 6 | 13 % |
| Stakeholder - Advisory Committee participant | 2 | 4 % |
| Partner | 24 | 51 % |
| Stakeholder | 6 | 13 % |
| Advisory Committee participant - CHAFEA Officer | 2 | 4 % |
| Other | 2 | 4 % |
| Total | 47 | 100 % |

Advisory committee (AC - 32 % of the workshop participants)

| Type of participant | Number | % |
|---------------------------------------|--------|--|
| Advisory Committee Member | 10 | 42% of the EU member states with a representative in the AC were present |
| Advisory committee observer | 5 | 83% of AC participants with observer status were present |
| Total Advisory committee participants | 15 | 38 % of all AC participants were present |

Stakeholders (SH - 17 % of the workshop participants)

| Type of participant | Number | % |
|---|--------|-----------------------------|
| Civil Society- Healthcare professionals | 5 | 11 % of the SH |
| Industry representatives | 0 | / |
| Institutional organisations | 3 | 7 % of the SH |
| Total | 8 | 18 % of all SH were present |

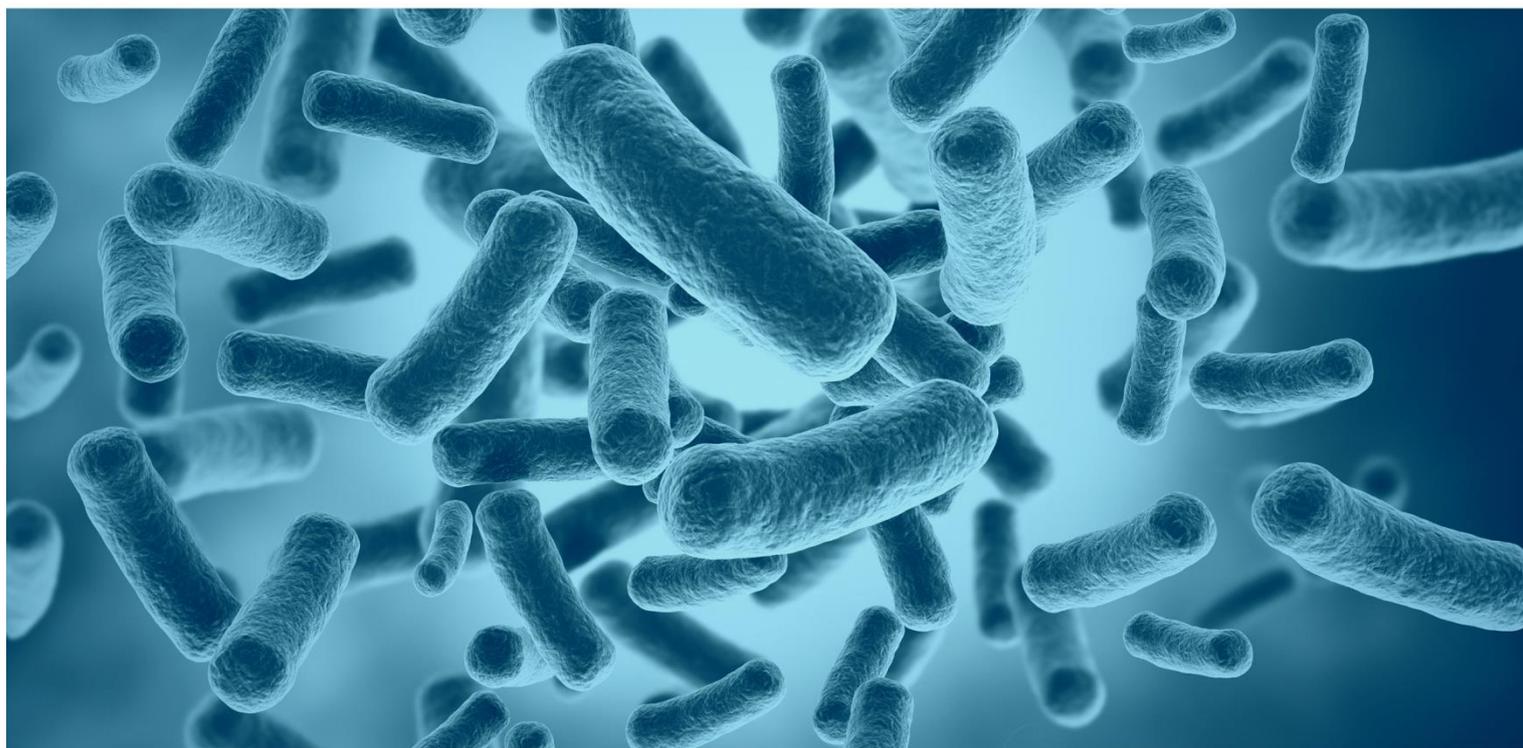
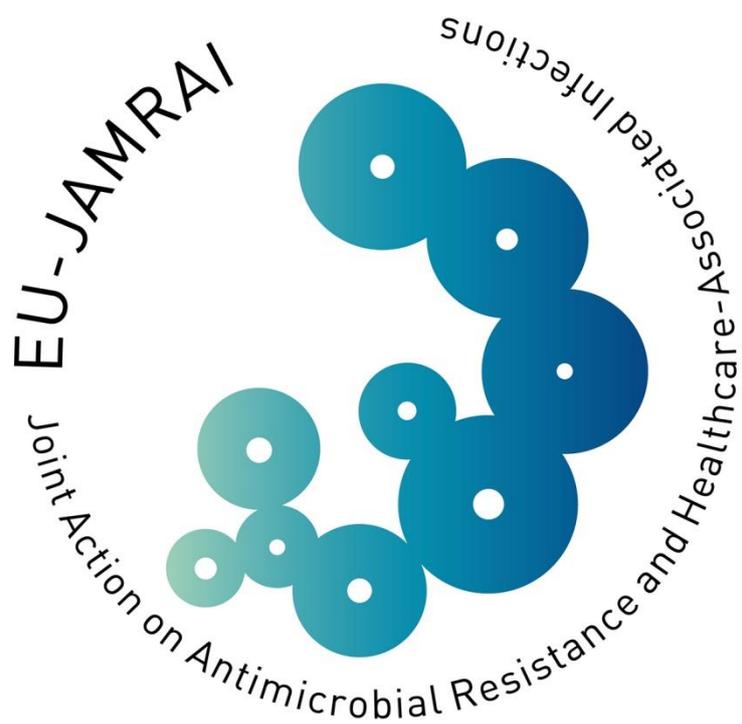
Annex III: Details on the priority measures selected so far

| | Categorie | title | Sustainability / Integration or both | Sector | Based on |
|---|-----------------------------|--|--------------------------------------|------------------|---|
| 1 | Generic actions | Hosting key documents produced by the JAMRAI on relevant websites | sustainability | human and animal | MS4.1 Survey of MS and SH priorities |
| 2 | | Sharing best practices, experiences and tools / Networking | sustainability and integration | human and animal | Council Conclusions (14 June 2019) - n° 35, 56, 57 |
| 3 | Communication and awareness | Technical guide for countries on Communication and Awareness activities | integration | human and animal | WP8 - D8.1 Awareness and Communication Plan WP8 - D8.4 Awareness and Communication High Level Meeting Council Conclusions (14 June 2019) - n° 41 |
| 4 | | Implement journalists' webinars on AMR/HCAI | integration | human and animal | WP8 - MS8.3 European Webinar for Science and Health Communication journalists Council Conclusions (14 June 2019) - n° 41 |
| 5 | | Use the online game app that will be produced | integration | human and animal | WP8 - D8.3 Online game app for high school students |
| 6 | | Promote the Antibiotic Resistance symbol that will be produced | integration | human and animal | WP8 - D8.2 European Prize: Antibiotic Resistance Symbol |
| 7 | IPC | Encourage adoption of an IPC framework and use an implementation model for IPC | integration | human | D6.1, Revised guidelines for the implementation of infection control program in healthcare settings / D6.3 Report on experience from country teams of introducing and working with the implementation model / |

| | | | | | |
|----|---------------------------|---|----------------|---|---|
| | | | | MS6.1.3 Initial presentation of Universal Infection Control Framework / Council Conclusions (14 June 2019) - n° 36,37 | |
| 8 | | Core elements of IPC programmes at national and facility level (hospitals, community and nursing homes) adapted to Europe | sustainability | human | D6.1, Revised guidelines for the implementation of infection control program in healthcare settings / D6.3 Report on experience from country teams of introducing and working with the implementation model / MS6.1.3 Initial presentation of Universal Infection Control Framework / Council Conclusions (14 June 2019) - n° 36,37 |
| 9 | | Core competencies on IPC for the undergraduate and postgraduate training of healthcare professionals and hospital administrators | sustainability | human | D6.1 MS6.1.3 Council Conclusions (14 June 2019) - n° 31, 36, 37 |
| 10 | | Develop mentorship and observership programmes for IPC in all settings | sustainability | human | Council Conclusions (14 June 2019) - n° 36,37 |
| 11 | Antimicrobial stewardship | Mapping of the different guidelines, tools and implementation methods of antimicrobial stewardship in the different levels of health care | sustainability | human | D7.1 Website with evaluated tools and information |

| | | | | | |
|----|--------------|--|----------------|------------------|--|
| 12 | | Implement AMS core elements and use an implementation model for AMS | integration | human and animal | D7.2 Report on workshop of models for implementation of stewardship tools D7.3 Council Conclusions (14 June 2019) - n° 36,37 |
| 13 | | Core elements of AMS programmes at national and facility level (hospitals, community and nursing homes; veterinarians and farmers), for European countries | sustainability | human and animal | D7.2 Report on workshop of models for implementation of stewardship tools D7.3 Council Conclusions (14 June 2019) - n° 36,37 |
| 14 | | Develop core competencies on AMS for AMS teams, for the undergraduate and postgraduate training of non-prescribers, and for hospital administrators, farmers and veterinarians | sustainability | human and animal | D7.2, D7.3 Council Conclusions (14 June 2019) - n° 31, 36, 37 |
| 15 | | Develop mentorship and observership programmes for AMS in all settings | integration | human and animal | Council Conclusions (14 June 2019) - n° 36,37 |
| 16 | Surveillance | Use of the JAMRAI (or similar) tool on consumption and resistance | integration | human | D7.4. Surveillance of antimicrobial use and resistance in human Council Conclusions (14 June 2019) - n° 42 |
| 17 | | Surveillance of AMR in diseased animals | integration | animal | D7.5. Surveillance of antimicrobial resistance in bacteria from diseased animals Council Conclusions (14 June 2019) - n° 42 |
| 18 | | Indicators and targets to monitor progress on the AMR European action | sustainability | human and animal | WP7 outputs Council Conclusions (14 June 2019) - n° 42 |

| | | | | | |
|----|-------------------------|---|--------------------------------|------------------|---|
| | | plan / national action plans | | | |
| 19 | One Health and NAP | Technical guide and tools to prepare and conduct an effective country to country visit | sustainability and integration | human and animal | WP5 - D5.1 Tool for country self-assessments Council Conclusions (14 June 2019) - n° 35 |
| 20 | | Maintain and use the network of supervisory bodies to share best practices between MS | sustainability | human | WP5 Council Conclusions (14 June 2019) - n° 35 |
| 21 | Research and innovation | Share gap analysis at EU level, to influence the research strategic agenda and future research activities | integration | human and animal | WP9 Milestone 9.1 : Gathering of national research priorities from at least five countries and gap identification |
| 22 | | Ensuring availability and improved use of existing antibiotics | sustainability | human and animal | Council Conclusions (14 June 2019) - n° 20, 43, 46 |
| 23 | | Boosting innovation | sustainability | human and animal | MS4.1 Survey of MS and SH priorities WP9 output Council Conclusions (14 June 2019) - n° 21, 44, 46, 47 |
| 24 | | Assist with evidence-based policymaking | integration | human and animal | MS4.1 Survey of MS and SH priorities WP9 output Council Conclusions (14 June 2019) |



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