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| Project title | European Joint Action on Vaccination – EU-JAV |
| WP number | WP3 |
| Deliverable number | D3.1 |
| Title | Evaluation plan |
| Responsible partner No. | 20 |
| Organisation Name | Folkhälsomyndigheten (FoHM) |
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| Nature | |
| R-report | R-The evaluation plan, including objectives, methodology, indicators and time plan. |
| O-other (describe) | |
| Dissemination Level | |
| PU -public | PU |
| CO -only for consortium members | |
| Delivery Month Planned | M6 |
| Actual Delivery Date (dd/mm/yyyy) | 09/02/2019 |

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Suggested deliverable outline:

- *To partners: feel free to adapt the outline of this deliverable while keeping a minimum of the titles suggested below if relevant.*

1. Objective of the deliverable

The Evaluation plan describes the objectives and targets of the Joint Action on Vaccination, as well as the methodology, indicators and time plan to be used in the evaluation of the Joint Action on Vaccination.

2. Methodology used to produce this deliverable (initial action plan, work conducted, partners involved, timeline, etc.)

The elaboration of the evaluation plan involved four main activities; a round table meeting at the beginning of the EU-JAV with all WP leaders for coordination; agreement of indicators and targets applying a logical framework; development of the evaluation design and methods, including tools for evaluation, formulation of questionnaires and baseline assessments to capture existing data and expectations of stakeholders; and the writing of the evaluation plan that describes evaluation design and methods/tools, research questions, baseline indicators and includes the logical frameworks for WP1-WP8.

The work was initiated at a roundtable meeting that was prepared and held with all WP leads at the Kick off meeting 05/09/2018, M2, at which time the WP3 work package (Evaluation of the project) and the principles of logical frameworks were presented by the FoHM-team.

A logical framework template and user-guide was prepared and distributed to all WP leaders 11/09/2018, M2. Support from FoHM was given to the WP leaders in order for them to define indicators and targets for preparation of logical frameworks using the template and guide. All but one WP had finalized their logical frameworks by January 31, 2019 (M6).

The baseline assessment tool was developed in cooperation with the JAV team at NIPH, Romania, and finalized M6. The baseline assessment tool included indicators and open-ended questions. Statistics for all 20 JAV member countries were included in the tool, which were to be verified by the JAV member countries.

The evaluation plan was drafted M3 and finalized M6. The evaluation plan includes a list of targets, the logical frame works for each of the work packages, an activity report template that was developed by WP1 (coordination) M2 to be used for monitoring, a process evaluation questionnaire, a self-evaluation questionnaire for evaluation of work packages, and the base line assessment tool.

3. Conclusion: outcome of deliverable findings.

An evaluation plan for the project is available.



Co-funded by
the Health Programme
of the European Union

Evaluation plan

European Joint Action on Vaccination (EU-JAV)

Introduction

Vaccines are one of the greatest medical achievements of all time, of considerable public health importance, protecting health throughout life. Overwhelming evidence demonstrates the efficacy of vaccines, e.g. the global eradication of smallpox through immunization and the markedly decreased burden of vaccine-targeted communicable diseases. The Global Polio Eradication Initiative (GPEI) aiming at global polio eradication has achieved a 99.9 % reduction in polio incidence worldwide since its launch in 1988 and preparations are under way for a polio-free world.

WHO Europe has for several decades placed a high priority on eliminating measles and rubella in the European region. Yet, from January 1, 2016 to mid-June 2017, 14000 measles cases resulting in 34 deaths were reported by the 30 EU/EEA countries. To achieve elimination goals and the United Nation's goals for sustainable development, effective vaccines and vaccine-preventable disease immunization programs with high coverage are crucial.

The Joint Action on Vaccinology

Over the last 10 to 15 years, an increasing number of individuals, including health professionals, doubt the benefit of vaccines, express concerns about their safety and question the need for them, the latter being referred to as hesitancy. A study on vaccine confidence conducted in 67 countries has shown that vaccine-safety related sentiment is a predominant driver of hesitancy in the WHO European region. The population also exhibit multiple and complex forms of distrust directed against doctors, governments or industry. Concerns have also been raised regarding the risk of vaccine shortage and stock outs since several episodes of shortages have led to both increased hesitancy and the potential risk of threatening population health. While the European countries face common epidemiologic- and socio-related vaccination issues, current practices in immunization policy vary widely among Member States leading to different vaccine schedules, mandatory vaccinations and vaccine recommendation processes. There are also huge challenges in human vaccine research and development across the value-chain; time to discovery of novel vaccine candidates, complexities of production, quality control and clinical development, prediction of safety and efficacy at all stages, improvement of modes of administration, analyses of determinants of confidence and evaluation of programs able to durably overcome hesitancy, including appropriate reminder systems, across a large continent rich of different cultures and identities.

The EU-Joint Action on Vaccination aims to address several important vaccine-related issues through:

- Establishing sustained cooperation of relevant Member State authorities.
- Define basic principles for vaccine demand forecasting.

- Developing a concept and prototype for a data warehouse for EU wide sharing of vaccine supply and demand data/information among dedicated stakeholders.
- Defining common stages and criteria for priority-setting of vaccine research and development
- Developing a concept and prototype for vaccine R&D priority setting framework.
- Defining structural, technical and legal specifications as regards to data requirements for electronic vaccine registries/databases/immunization information systems.
- Providing a framework to cooperate on confidence from research to best practices, and implementation.

Overview of work packages

The Joint Action on Vaccinology is structured around eight work packages (WPs). WP1, WP2 WP3, WP4 are the horizontal, with focus on coordination, dissemination, monitoring and evaluation, and integration in national policies and sustainability, respectively, and will direct the course of the work to ensure the expected outcomes and four core work packages (WP5, WP6, WP7 and WP8) as detailed in Table 1.

Table1. Work packages

| Work package number | Title | Description |
|---------------------|---|---|
| 1 | Coordination of the project | Actions undertaken to manage the project and to make sure that it is implemented as planned |
| 2 | Dissemination of the project | Actions undertaken to ensure that the results and deliverables of the project will be made available to the target groups. |
| 3 | Evaluation of the project | Actions undertaken to verify if the project is being implemented as planned and reaches its objectives. |
| 4 | Integration in national policies and sustainability | Actions undertaken for integration of evidence-based policy initiatives and key recommendations, and to ensure the sustainability of the JA activities at national or on the local or regional level. |
| 5 | Immunization information systems to strengthen surveillance | Actions undertaken to increase vaccine surveillance capabilities and to increase vaccination coverage at the national and infra-national/regional levels. |
| 6 | Vaccine supply and preparedness | Actions undertaken to define common basic principles for vaccine demand forecasting and explore the feasibility to develop a concept for a data-warehouse for an EU-wide central repository on vaccine supply and demand data. |
| 7 | Vaccine research and development priority setting framework | Actions undertaken to define common stages and criteria for priority-setting of vaccine R&D and develop a concept and prototype for a vaccine R&D priority-setting framework. |
| 8 | Vaccine hesitancy and uptake. From research and practices to implementation | Actions undertaken to develop a more systematic overview and analysis of the current situation, activities best practices and lessons learned in Member States, among stakeholders and partners, and in the research community concerning vaccine hesitancy and confidence. |

General objectives of the Joint Action on Vaccination

Vaccination is a valuable investment in health. It is a complex cross sectoral issue, involving basic immunology, discovery, benefit/safety evaluation and epidemiological surveillance, public health policies and health systems planning, forecasting and financing, health professionals' education and literacy, and cultural identities and social norms. The EU-Joint Action on Vaccinology aims to build concrete tools to strengthen national responses to vaccination challenges in Europe and will thereby improve public health.

Specific targets of the Joint Action on Vaccination

The specific targets are listed in Annex A.

The evaluation process

An evaluation is the systematic assessment of the success of a project. It is a rigorous process that must be planned from the onset of the project and conducted throughout the project period.

The JAV evaluation will analyze, appraise and draw judgement on the success of the project, through systematic analyses of inputs, activities, outputs, outcomes and impacts of the interventions in relation to its objectives. It is important to clarify that the evaluation ends when the EU-JAV project ends. The evaluation of intermediate and long-term outcomes will be mainly based on expert knowledge and earlier experiences from key informants.

The process evaluation of the EU-JAV will be a longitudinal assessment and is linked to the planning and organization of the activities. It will focus on whether the activities are implemented according to plan, and if constraining and fostering factors and feedback will be identified during the implementation and dealt with, and how the quality of the JAV implementation will be assured.

The evaluation aims to assess the Joint Action on Vaccination towards the end of the program period and is linked to the specific targets of the Joint Action and will verify if the stated targets have been achieved and will assess whether the specific objectives have been achieved or have been possible to achieve.

Thus, the main objective is to evaluate internally if the overall aim of the EU-JAV program is achieved concerning the building of concrete tools to strengthen the national responses to the vaccination challenges, and assess if the tools could improve public health in countries participating in JAV and in Europe.

Research questions

The main research questions in the evaluation are:

1. Is the overall aim of the EU-JAV program achieved?
2. Are the specific targets of the WPs achieved?
3. Are there unintended outcomes (favourable/non favourable)?

Objectives

The main objective is to evaluate internally if the overall aim of the EU-JAV program is achieved..

The specific objectives are to:

1. Evaluate the process and the impact of the vertical work packages (WP5-WP8)
2. Evaluate the process of the horizontal work packages (WP1-WP4)
3. Evaluate the process of three general meetings of the project
4. Evaluate the EU-JAV globally and summarize results in reports (midterm and final evaluation reports)

Methods

The methodology will be both qualitative and quantitative, involving structural indicators, questionnaires, surveys, in-depth interviews and logical framework matrix analysis.

The evaluation of the vertical and horizontal work packages will be discussed at annual General Assembly meetings.

Vertical work package achievements will be discussed during quarterly Executive board meetings with work package leaders and coordinators. For the process evaluation of the vertical work packages, data will be collected from meeting notes, follow-up of activity plans and logical frame work analysis. Furthermore, surveys and interviews will be conducted based on indicators. Interviewees are program managers and WP coordination leaders. Data from surveys/questionnaires will be collected before and after EU-JAV meetings and before writing mid-term and final evaluation reports.

The evaluation of the horizontal work packages will be similar to that of the vertical work packages. Horizontal work package achievements will be discussed during the quarterly Executive Board meetings. Data will be collected from meeting notes, follow-up of activity plans and logical frame work analysis. Data will also be collected through surveys/questionnaires of the horizontal work package leaders before and after EU JAV meetings and before writing mid-term and final evaluation reports.

The evaluation will be through:

- a follow-up of a baseline assessment conducted in the early part of the EU-JAV program. The baseline assessment will include indicators and open-ended questions to be answered by program managers in EU-JAV states.
- a self-evaluation questionnaire to the WPs where the questions are based on targets and indicators in the logical frameworks for each WP.
- a process evaluation questionnaire to the WPs with the purpose to catch constraining and fostering internal and external factors.

Case studies of impacts and future possible impacts of the vertical WPs together with the partners specified in the General Agreement will be considered. The purpose of the case studies is to collect more data (ex-ante and ex-post) from specific countries. This data will give more and deeper understanding of the forthcoming challenges.

Other data used for the evaluation are data from the general meetings of the program collected by notes, participant lists and other information gathered during the program meetings.

Indicators

Indicators for targets are specified in the work package logical frameworks (Annex B). Other indicators are specified in annex C – F.

Time frame

Evaluation plan to be available at M6 (D3.1). The first half year of the EU-JAV program has been used to elaborate the evaluation plan, including logical frameworks (Annex B), tools for monitoring (Annex C) and process evaluation (Annex D, Annex E) and a baseline assessment tool (Annex F).

The process evaluation questionnaire for each WP will be circulated before annual meetings.

Self-evaluation questionnaires for each WP will be elaborated M8-9 and data collected before annual meetings.

An in-depth interview tool will be elaborated in time for the second annual meeting (M24).

The Midterm evaluation report M18 (D3.2). A first assessment of the work packages to evaluate progress and to fine tune activities.

A tool measuring long-term impact will be elaborated M24-M30 and sent out to WPs in M32 for discussions and improvements.

Annexes

- A. List of targets for Joint Action of Vaccination.
- B. Logical frameworks for each of the work packages
 - 1. Logical framework WP 1-Coordination.
 - 2. Logical framework WP 2-Dissemination of the project.
 - 3. Logical framework WP 3-Evaluation of the project.
 - 4. Logical framework WP 4-Integration in national policies and sustainability.
 - 5. Logical framework WP 5-Immunization information systems to strengthen surveillance of vaccine coverage.
 - 6. Logical framework WP 6- Vaccine supply and preparedness.
 - 7. Logical framework WP 7-Vaccine research and development priority-setting framework.
 - 8. Logical framework WP 8- Vaccine hesitancy and uptake. From research and practices to implementation.
- C. A quality checklist for monitoring (Activity Report template).
- D. Process evaluation questionnaire.
- E. Questionnaires for evaluation of work packages (Self-evaluation questionnaire template).
- F. Base line assessment tool, including indicators and open-ended questions.

| WORK PACKAGE | TARGETS |
|---------------------|---|
| WP1 | At M6, all Governance bodies (Executive Board, General Assembly, Member State Committee and Stakeholders Forum) in charge of executive decisions and strategic orientations for the project have been set up. The target group is the whole consortium. |
| WP1 | The tasks are respected and completed on time, as indicated in the Grant Agreement. Target groups are WP teams and the consortium. |
| WP1 | Ensure that information is communicated between all project members and with relevant stakeholders throughout the project. Target groups are the consortium, the stakeholders and the public. |
| WP2 | The EU-JAV communication, both internal and external are set-up and comprises a website with a logo with a defined content and relevant information for the target groups, i.e. policy makers, partners, health professionals, scientists and the general public (external website), and project members of JAV (internal website). |
| WP2 | Dissemination Plan available by month 7. Includes the Strategic Dissemination Plan and the National Dissemination Plans. Developed for the project partners. The Strategic Dissemination defines the overall dissemination strategy for the project, so that each partner may develop their national dissemination plans accordingly. |
| WP2 | Identification of a diverse and comprehensive group of stakeholders involved in vaccination questions in all MS/partners involved in the JA including existing networks and EU-funded or international projects plus those that are hard to reach. The groups of stakeholders are those indicated in the Stakeholder Identification Tool circulated to all partners. |
| WP2 | Raise the general public's awareness on the importance of vaccination using relevant and transparent communication with individuals and organisations by social media presence, publication of press releases, other publications (e-newsletters, scientific journal articles, etc.) and organization of events throughout project implementation. |
| WP3 | Elaborated tools for monitoring processes and for evaluation of processes/outcomes are ready at M6 and described in the evaluation plan. Tools are usable by WPs. The purpose of a process evaluation tool: measuring positive/negative internal and external feedback. The overall purpose is at least twofold: the analysis of answers from WPs should provide useful information for WPs to do better and second, it should provide information for an effective risk management, i.e. if activities are in progress or finished and if the target is reached or possible to reach in time. Target groups are the WP teams and the consortium. |
| WP3 | The purpose of a tool measuring long-term effects (ready at M36): Provide a systematic framework for stakeholders on country level (i.e. program managers etc.) when planning, implementing and evaluating national, regional or local interventions with the aim to increase the |

Annex A.

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| | vaccination coverage. Target groups are EU-JAV member states and stakeholders on country level. |
| WP3 | An elaborated tool will be used to collect relevant data in close connection to every general meeting with the purpose to enhance the effectiveness of the meetings. The target group is the whole consortium. |
| WP3 | The evaluation results in one midterm report and one final report. The midterm report focuses on the process evaluation findings with the purpose of improvement of the project. The final report focuses on both process evaluation findings and outcome evaluation findings, including the baseline assessment and gives a description of the long-term evaluation tool. The purpose of the final report is both constructive and conclusive and therefore increases the possibilities for shared lessons for learnings. Target groups are the consortium, EU-JAV member states, stakeholders and the public. |
| WP4 | <p>Composition and role of the Vaccine network. The Vaccine network composed of two bodies: Member States Committee (MSC) and the Stakeholders Forum (SHF) is established at M6, terms of reference (ToR) is recognized, adopted by MSC, and publicly available. [An approved action plan is outlined at M12]. A secretariat supports the network with the agendas for meetings, minutes, action plan drafts, follow-ups.</p> <p>The target groups are the following actors: representatives of competent authorities (Ministry of health) of each of the 27 Member States of the European Union, representatives of competent authorities (Ministry of Health) of each of the 3 EU-JAV Associated countries (Bosnia, Serbia, Norway), major organizations and institutions having a legitimate interest in the Joint Action (WHO, EMA, OECD, ECDC).</p> |
| WP4 | Main outlines of the action plan has been developed at M12, based on a review of the main deliverables expected within the WP5 to 8 and based on needs and expectations from members of the network. The target groups are the members of the Vaccine Network and the WP leaders of the WP 5 to 8. |
| WP4 | Action plan has been developed at M36, with agreed measures to ensure that there will be sustainable communication and cooperation between MS and non-EU JAV consortium member countries. The target group are the members of the Vaccine Network (MSC). |
| WP4 | Pre- and in-service educational activities are implemented in medical and paramedical curricula on vaccines and vaccination programs for HCW and future HVW in Europe. Target groups are HCW and students under education to HCW in following EU MS and associated countries in JAV. |
| WP4 | <p>On M36 an interactive platform for discussion and advisory on policies, guidelines etc. Has been built with the purpose to strengthen the communication and cooperation between EU/EEA NITAG.</p> <p>The target group are: NITAGS, NITAGs chairman, Member States, NITAGS network (WHO), MSC.</p> |

Annex A.

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| WP4 | An analysis of the evidence based behind the national immunization programs will be a base for a strengthened communication and cooperation between NITAGS. |
| WP4 | Increased awareness and tailored communication for young adults on the importance of vaccination in general and vaccination against HPV and HBV through the use of the ECL youth ambassadors. The targets groups are the groups of Youth Ambassadors and young people living in the EU. |
| WP5 | Assessment and agreement on assessment on data quality, collection processes and interoperability on IIS in at least 10 European countries using survey methodology and meetings with relevant registry and database owners. The target groups are EU-MS and partner countries. |
| WP5 | Development of functional specifications for the pilot platform |
| WP5 | At least 6 partners have adopted the protocol M16. The target groups are EU-MS and partner countries. |
| WP5 | A computer algorithm is developed and shared and accepted for tests by 6 partners on a pilot platform by M20. The target groups are EU-MS and partner countries. |
| WP5 | At least 4 countries are providing MMR coverage data for the pilot study by month M22-M26. At least two neighbouring countries provide subregional data by month M22-M26. |
| WP5 | Description of different approaches of organization, distribution channels used, timing and frequency of reminding. Identification of key barriers for the implementation of vaccine reminder system. Recommendations for the optimal use of existing systems and the development of future reminder systems. The target groups are the EU MS, partner countries and stakeholders |
| WP5 | Analyse and map main target groups for a possible measles vaccination campaign per country included in EU JAV, based on MMR coverage data from task 5.2 and country knowledge (M36). |
| WP5 | Identify structures, criteria and funding needed for a coordinated cross-border measles vaccination campaign in 2021, including existing immunization activities that need to be completed (i.e. existing campaigns, routine immunisation, school/work vaccination). |
| WP5 | Explore the willingness in EU and associated countries for a joint cross-border measles immunization campaign, across ages and EU and associated countries. |
| WP5 | Report to JAV partners of findings of targets 1-3 in a final strategic document for the conduct of a cross-border measles vaccination campaign (M36). |
| WP6 | By M12, a survey collecting data on previous (last 3 years) and current vaccine shortages and response at the national and European level, and on vaccine procurement modalities, from a representative sample of JAV participating countries, is completed (including analysis and report). Data will be collected from the MSs through the collaboration with MS's |

Annex A.

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| | <p>country procurement and supply units. By M12 Information will also be collected from other relevant stakeholders, such as national regulatory agencies and product manufacturers.</p> <p>Target groups are the consortium member states.</p> |
| WP6 | <p>By M24, an evaluation of financing mechanisms for purchase and stocks of vaccines in at least 10 consortium member countries, with the purpose to identify sustainable solutions for a centralized procurement. The target groups are the consortium member countries.</p> |
| WP6 | <p>By M30, elaborate procedures and methods to estimate needs and procurement of vaccines in consortium member countries in the short and long-term. Procedures and methods will be validated by at least 50% of participating countries (including Northern, Central and Southern MS and if possible countries that have legal vaccine mandates) and once validated will be made available to all consortium members.</p> <p>Target group are all consortium members.</p> |
| WP6 | <p>By M12, Understanding mechanisms for defining the anticipated needs (i.e. geographical issues) to ensure sufficient size of supply and stockpiles, including their sustainability. The target groups are MS, to the JAV associated countries and stakeholders.</p> |
| WP6 | <p>By M18, A gap and option analysis (concept analysis) on the possibilities for a regional or European virtual stockpiles on vaccine management needs and stocks has been performed. The target groups are MS, to JAV associated countries and the stakeholders.</p> |
| WP6 | <p>By M36, the knowledge gained from the work in task 6.2 (the mechanisms for defining the anticipated needs and the concept analysis) is used to develop a recommendation on mechanisms of management of forecasting, supply and stocks.</p> |
| WP7 | <p>Evidenced-based tools and methods, based on the Multi-criteria decision analysis (MCDA) methodology, are developed with the purpose to identify and prioritize vaccine and vaccination research in EU.</p> <p>Target groups are international and national research programmes, MS research institutions, civil society, charitable organizations and the vaccine industry.</p> |
| WP7 | <p>1. Financial mechanisms are identified with the purpose to cooperate among EU MS to fund key vaccines and vaccination research along the value chain, and according the prioritization (annual list 1 and 2) in EU. Target groups are international and national research funders, MS, the European Commission, the vaccine industry and charitable organizations</p> <p>2. Mechanisms are identified with the purpose to strengthen collaboration in key vaccines and vaccine research in EU. Target groups are international and national programmes, MS research institutions and the vaccine industry.</p> |
| WP8 | <p>The best practices and lessons learned in vaccine hesitancy-related work in the MS and their regions and among stakeholders and partners,</p> |

Annex A.

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| | research community and existing and ongoing projects and programmes are systematically overviewed and reported by M36 (July 2021). |
| WP8 | An online working environment (e-learning platform) is developed to provide research-based knowledge and best practices and lessons learned for Member State and stakeholder actors working with NIPs throughout Member States and Non-MS participating in JAV. |
| WP8 | By M30, finalize a report on frameworks and methods for A) detecting early signals of lowering public confidence in real time; B) monitoring over time and space the opinions etc towards vaccination. At least 20% of the participating countries are involved in identifying vaccine-related topics and keywords. |
| WP8 | By M24, a public vaccine confidence monitoring platform is completed and delivered. The target groups are the general public in EU and in other countries, professionals in health care, policy makers. |



Logical framework

Work package 1

Coordination of the project

Date: January 24, 2019

Work package leader: INSERM, France

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| Specific objective 1 | To ensure that appropriate methods and tools are put in place so that the project progresses in conformity with its work plan, the Grant Agreement and the Consortium Agreement and reaches its objectives and expected impact |
| Target 1 | At M6, all Governance bodies (Executive Board, General Assembly, Member State Committee and Stakeholders Forum) in charge of executive decisions and strategic orientations for the project have been set up. The target group is the whole consortium. |
| Indicator 1 | The Executive board (EB) is established and holds regular meetings (every 3 months). Measured by list of members for the EB and minutes from meetings. |
| Indicator 2 | The General Assembly (GA) is established and holds regular meetings (every year). Measured by list of members for the GA and minutes from meetings. |
| Indicator 3 | The Member State Committee (MSC) is established. Measured by list of nominated members for the Member State Committee, MSC) and minutes from meetings. |
| Indicator 4 | Stakeholders Forum is established. Measured by list of members of the Stakeholders Forum and minutes from meetings. |
| Indicator 5 | Vaccine Network is established. Measured by the Terms of Reference. |
| Indicator 6 | Annual meetings with representatives of all partners, WP and stakeholders are organized every year at M12, M24 and M36. Measured by attendee list and minutes. |
| Output 1 | Minutes with action points for EB, GA and MSC meeting. Internal risk: delays in circulating minutes could lead to delays in the implementation of the actions decided during the meeting. This will be mitigated by circulating the minutes to meeting attendees within 10 days after the meeting requesting a feedback within 7 days. |
| Activities Output 1 | <ol style="list-style-type: none"> 1. The project coordination team (PCT) sends the meeting agenda to all members of the EB, GA or MSC. 2. The (PCT) organises the meeting and sends details to all participants. 3. The meetings' minutes are circulated for revision to all participants. 4. Meetings' minutes are uploaded on the intranet and available to all partners. |
| Intended Outcome | At the end of the project all governance bodies held meetings as planned. |
| Unintended outcomes | Lack of participation and involvement of members during meetings. This will be mitigated by setting up the date of meetings well in advance using Doodle to ensure that as many participants are available and by asking those who are not available to be represented by a team member. The agenda will be sent 2 weeks in advance and the request for activity reports (in the case of ExB meetings) 3 weeks in advance. |
| Target 2 | The tasks are respected and completed on time, as indicated in the Grant |

Annex B.1

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| | <p>Agreement.</p> <p>Target groups are WP teams and the consortium.</p> |
| Indicator 1 | <p>Milestones and deliverables are submitted on time on the EC portal.</p> <p>Measured by computer logs.</p> |
| Indicator 2 | <p>Activity reports are completed by WP leaders before each EB meeting.</p> <p>Measured by the documents and time of delivery.</p> |
| Indicator 3 | <p>Internal financial report at M12.</p> <p>Measured by report document and time of delivery.</p> |
| Indicator 4 | <p>Interim technical and financial report at M18 is submitted on time on the EC portal.</p> <p>Measured by report document, time of delivery and computer logs.</p> |
| Indicator 5 | <p>Technical and financial report at M36 is submitted on time on the EC portal.</p> <p>Measured by report document, time of delivery and computer logs.</p> |
| Indicator 6 | <p>Questions from partners regarding any administrative and financial issue are answered promptly. Measured by emails and time of delivery.</p> |
| Output 1 | <p>Activity reports are completed by WP leaders before each EB meeting.</p> <p>Internal risk: The activity reports are not received in time by the PCT and impairs a good monitoring of the project's progress. This will be mitigated by allowing enough time for WP leaders and teams to complete the report.</p> |
| Activities Output 1 | <ol style="list-style-type: none"> 1. The PCT provides WP leaders with a template for the activity report and guidelines by M3. 2. The PCT requests the activity report to WP leaders 3 weeks before the EB meeting. 3. WP leaders send back the activity reports, mentioning any delays or deviations from the initial work plan 3-4 days before the EB meeting. 4. The activity reports are discussed during the EB and actions are discussed to mitigate any possible delays/risks 5. The PCT propose any appropriate mitigation measures to the GA. 6. The activity reports are uploaded on the intranet within a month after the EB meeting. |
| Output 2 | <p>Interim and Final technical and financial reports.</p> <p>Internal risk 1: the material is not communicated on time by partners to the PCT impacting the quality of the reports which could lead to a suspension of the payment deadline by the EC. This will be mitigated by requesting the information 2,5 months before the submission of the report and by circulating detailed guidelines.</p> |
| Activities Output 2 | <ol style="list-style-type: none"> 1- The PCT provides WP leaders with templates for the technical and financial reports by M9. 2- The PCT requests 1st drafts of the technical and financial reports 10-11 weeks before the deadline 3- Once approved by the PCT, beneficiaries can upload the financial report on the EC portal at M21 and M39 |

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| | <p>4- Once uploaded, the PCT checks the report and gives approval for signature at M21 and M39</p> <p>5- The nominated Financial signatory signs the financial report for each beneficiary at M21 and M39</p> <p>6- The technical reports are uploaded on the intranet at M21 and M39.</p> |
| Intended outcomes | <p>1- All milestones have been achieved and all deliverables are delivered on time</p> <p>2- All deliverables correspond to what was expected</p> <p>3- Deliverables and results of the JA reach expected impacts</p> |
| Unintended outcomes | <p>1- Some milestones have not been achieved and some deliverables have not been uploaded at the end of the project</p> <p>2- Deliverables and milestones are submitted with major delays</p> <p>3- This will be mitigated by organising regular ExB meetings (at least every 3 months) to monitor progress, anticipate any delay and find solutions if required.</p> |
| Target 3 | <p>Ensure that information is communicated between all project members and with relevant stakeholders throughout the project.</p> <p>Target groups are the consortium, the stakeholders and the public.</p> |
| Indicator 1 | <p>The content of the website is updated monthly.</p> <p>Measured by computer logs</p> |
| Indicator 2 | <p>Meetings of the EB are organised at least quarterly.</p> <p>Measured by list of participants and minutes of the meeting</p> |
| Indicator 3 | <p>Requested progress meetings. Measured by the number of progress meetings between PCT and WPs</p> |
| Indicator 4 | <p>Templates for reporting are provided with guidelines by email and on the intranet. Measured by template documents loaded on the intranet.</p> |
| Indicator 5 | <p>Contacts with coordinators and project managers of other EU projects or initiatives are initiated and maintained to share good practices. Measured by correspondence between parties.</p> |
| Indicator 6 | <p>All documents on the project requested to the PCT are available on the intranet</p> |
| Output 1 | <p>See Target 1 Output 1</p> |
| Activities Output 1 | <p>See Target 1 Activities Output 1</p> |
| Output 2 | <p>See Target 2 Output 2</p> |
| Activities Output 2 | <p>See Target 2 Activities Output 2</p> |
| Output 3 | <p>The external website containing information about the partners, the project, deliverables accessible by partners, policy makers, health professionals, any stakeholder related to vaccination and the public is online by M5.</p> |
| Activities | <p>1- Select the best offer (experience with European projects, price) from 3 quotes by M3</p> |

Annex B.1

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| Output 3 | <ul style="list-style-type: none"> 2- Draft content of website by M4 3- Develop structure in close collaboration with the supplier by M5 4- Update monthly with new content 5- Monitor use by partners until the end of the project |
| Output 4 | <p>An intranet consisting of contractual documents, address books, reporting templates, guidelines, deliverables and any document related to WP is available to all partners.</p> <p>Internal risk: the partners encounter difficulties to communicate on the project and share documents within working groups.</p> |
| Activities Output 4 | <ul style="list-style-type: none"> 1- Select the best offer (experience with European projects, price) from 3 quotes by M3 2- Draft content of website by M4 3- Upload relevant documents (grant agreement, templates, logo, guidelines, agenda and minutes of meetings, deliverables) during the course of the project by M6 4- Provide guidelines to partners on how to register and upload documents on the intranet by M6 |
| Intended outcomes | <ul style="list-style-type: none"> 1- At the end of the project the ExB held meetings as planned. 2- Reports are submitted on time to the European Commission. 3- The website is consulted regularly by external parties and this is monitored by quantifying the number of hits. 4- People (general public and stakeholders) are subscribing to receive updates and newsletters on the project. 5- Partners use the Intranet to share documents and store deliverables. |
| Unintended outcomes | <ul style="list-style-type: none"> 1. Lack of participation and involvement of members during meetings. This will be mitigated by setting up the date of meetings well in advance using Doodle to ensure that as many participants are available and by asking those who are not available to be represented by a team member. The agenda will be sent 2 weeks in advance and the request for activity reports (in the case of ExB meetings) 3 weeks in advance. 2. The website is not visited. This will be mitigated by communicating the website address during presentations on the project, by updating the website regularly. And by using a language adapted to the general public. 3. The Intranet is not used by partners. This will be mitigated by providing clear guidelines on how to register and upload documents on the Intranet. |



Logical framework

Work package 2

Dissemination of the EU-JAV results

Date: February 1, 2019

**Work package leader: HCDCP, Greece and
INSERM, France**

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| <u>Specific objective 1</u> | Develop sustainable communication so that the target groups have access and are reached with relevant information that they could give feedback on. |
| Target 1 | The EU-JAV communication, both internal and external are set-up and comprises a website with a logo with a defined content and relevant information for the target groups, i.e. policy makers, partners, health professionals, scientists and the general public (external website), and project members of JAV (internal website). |
| Indicator 1 | Website and intranet are operational and online by M6. Measured by functional website address and access to the intranet |
| Indicator 2 | Logo & visual identity is available and shared by email with all relevant parties by M6. Measured by documents and time of delivery to partners. |
| Indicator 3 | An internal & external template for communication and documents is shared by email with all partners by M6. Measured by documents and time of delivery to partners. |
| Indicator 4 | Leaflet is available and shared by email and by post with relevant parties by M6. Measured by document and time of delivery to partners. |
| Indicator 5 | E-newsletter is published at M6, M12, M18, M24, M32, M36 and shared by email and on the website. Measured by functional link on the website, time of delivery to partners. |
| Output 1 | The external website containing information about the partners, the project, deliverables accessible by partners, policy makers, health professionals, any stakeholder related to vaccination and the public is online by M5. |
| Activities in logical order | <ol style="list-style-type: none"> 1- Select the best offer (experience with European projects, price) from 3 quotes by M3 2- Draft content of website by M4 3- Develop structure in close collaboration with the supplier by M5 4- Update monthly with new content. 5- Monitor use by partners until the end of the project |
| Output 2 | <p>An intranet consisting of contractual documents, address books, reporting templates, guidelines, deliverables and any document related to WP is available to all partners.</p> <p>Internal risk: the partners encounter difficulties to communicate on the project and share documents within working groups.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1- Select the best offer (experience with European projects, price) from 3 quotes by M3. 2- Draft content of website by M4. 3- Upload relevant documents (grant agreement, templates, logo, guidelines, agenda and minutes of meetings, deliverables) during the course of the project by M6. 4- Provide guidelines to partners on how to register and upload documents on the intranet by M6. |

Annex B.2

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| Output 3 | A logo and templates for external communication (presentations, press releases, articles) are created. |
| Activities in logical order | <ol style="list-style-type: none"> 1- Select the best offer (experience with European projects, price) from 3 quotes by M3 2- Share a few designs and colours to the project members for selection of the final logo by M4 3- Share the finalised version of the logo in different format with partners by M4 |
| Output 4 | Leaflets are produced and distributed at meetings, events and to any relevant stakeholder by all partners. |
| Activities in logical order | <ol style="list-style-type: none"> 1- Select the best offer (experience with European projects, price) from 3 quotes by M3. 2- Draft content of the leaflet by M5. 3- Finish graphic design in close collaboration with the graphic designer by M5. 4- Print, email electronic versions and post hard copies to partners and relevant parties by M6. 5- Recommend distribution of the leaflet at events during the life of the project. |
| Intended outcomes | <ol style="list-style-type: none"> 1. The website is consulted regularly by external parties and this is monitored by quantifying the number of hits. 2. People are subscribing to receive updates and newsletters on the project. 3. Partners use the available templates to communicate on the project during conferences. 4. Communication to the general public on efforts to improve vaccination policies and programmes at a national and European level by updating regularly the content of the website and measuring the number of hits following the publication of a new article on the website. |
| Unintended outcomes | <ol style="list-style-type: none"> 1- The website is not visited. This will be mitigated by communicating the website address during presentations on the project, by updating the website regularly and by using a language adapted to the general public. 2- Negative press or comments from anti-vaccination groups. This will be mitigated by responding to negative comments and including a Q&A section in newsletters with examples of good and bad comments with responses and measures that have been undertaken to address the comments. 3- Communication kit is not used by partners. This will be mitigated by sharing the templates both by emails and on the intranet for easy access. |
| Target 2 | <p>Dissemination Plan available by month 7.</p> <p>Includes the Strategic Dissemination Plan and the National Dissemination Plans. Developed for the project partners.</p> |

Annex B.2

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| | The Strategic Dissemination defines the overall dissemination strategy for the project, so that each partner may develop their national dissemination plans accordingly. |
| Indicator 1 | EU-JAV Strategic Dissemination Plan draft available by month 4. Measured by email communication of the draft to Coordinating Beneficiary. |
| Indicator 2 | EU-JAV Strategic Dissemination Plan available to partners by month 5. Measured by email circulation to all partners. |
| Indicator 3 | EU-JAV Dissemination Plan shared by month 7 with project partners. Measured by email circulation to all project partners. The Dissemination plan will include the national dissemination plans. The final document will be one document that will be circulated to all. |
| Output 1 | EU-JAV Strategic Dissemination Plan by month 4 Internal risks: Delays in the hiring of the dissemination plan expert. External risks: Delays in receiving the brief questionnaire from project partners. |
| Activities in logical order | <ol style="list-style-type: none"> 1. List of contact persons designated by each partner, by 30/09/18. 2. Meeting of HCDCP with dissemination expert to decide on the contents of the Strategic Dissemination Plan by 15/10/18. 3. Strategic Dissemination Plan draft to HCDCP coordination team by 15/11/18. 4. Strategic Dissemination Plan draft to Coordinating Beneficiary for comments by 20/11/18. <p>Strategic Dissemination Plan ready by 30/11/18.</p> |
| Output 2 | EU JAV Dissemination plan available by month 7. Internal risks: External risk 1: Delays in receiving the project partners comments on the first draft of the Strategic Dissemination Plan. External risk 2: Delays in receiving the National Dissemination Plans from project partners. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Strategic dissemination plan sent to partners requesting for national dissemination plans, by 31/01/19. 2. National Dissemination Plans available and adapted in English by each partner by 15/02/19. 3. EU-JAV Dissemination Plan circulated within EU-JAV contributors, by 28/02/19. |
| Intended outcomes | EU-JAV Social Media Pages, Press releases, Connection with External Stakeholders. |
| Unintended outcomes | Negative feedback from stakeholders opposing the project's approach and results (vaccine hesitant groups, scientists who share different research priorities and politicians/ political parties with anti-vaccination agendas). |

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| <u>Specific objective 2</u> | Engage in open dialogue and exchange of information with stakeholders involved in vaccination activities |
| Target 1 | Identification of a diverse and comprehensive group of stakeholders involved in vaccination questions in all MS/partners involved in the JA including existing networks and EU-funded or international projects plus those that are hard to reach. The groups of stakeholders are those indicated in the Stakeholder Identification Tool circulated to all partners. |
| Indicator 1 | Electronic distribution of stakeholder identification tool and guidelines by 24/10/18. Measured by emails and reminders sent. |
| Indicator 2 | Lists of stakeholders available by 05/11/2018, M4, provided that project partners provide them on time. |
| Output 1 | List of stakeholders involved in vaccination and their main characteristics Internal risk: project partners do not reply on time and in full accordance with the provided guidelines. External risk 1: stakeholders not willing to be listed as such. External risk 2: change of circumstances or characteristics of stakeholders listed/identified. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Decide on main issues regarding vaccines and vaccinations, by 10/10/18. 2. Decide on main stakeholder groups and the characteristics that will best serve our purpose, i.e. the optimum dissemination of the project's outcomes and key messages, by 10/10/18. 3. Customized stakeholder identification tool for recording stakeholders' data, by 20/10/18. 4. Stakeholder identification in each partner country, by 24/10/18. 5. Electronic questionnaire for characteristics assessment to targeted stakeholders, by 28/02/19. 6. Update and enrichment of stakeholder characteristics and needs, by 30/04/19. |
| Intended outcomes | <p>Better communication of EU JAV results and outputs.</p> <p>Building relationships between EU JAV and relevant stakeholders.</p> <p>Targeted implementation of project actions.</p> <p>Engagement of stakeholders in project activities.</p> |
| Unintended outcomes | Snowball effect that leads to the mobilization of additional stakeholders not originally identified. |
| Target 2 | Raise the general public's awareness on the importance of vaccination using relevant and transparent communication with individuals and organisations by social media presence, publication of press releases, other publications (e-newsletters, scientific journal articles, etc.) and organization of events throughout project implementation. |
| Indicator 1 | Events organized as measured by the number of events and the number of participants. |

Annex B.2

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| Indicator 2 | Press releases issued as measured by the number of press releases. |
| Indicator 3 | Reports submitted/published as measured by the number of reports submitted and the number of recipients. |
| Indicator 4 | Scientific Publications/Journal as measured by the number of articles published. |
| Indicator 5 | E-news letters published as measured by the number of E-newsletters posted. |
| Indicator 6 | Transparent communication with public as measured by visitor comments on "contact us" form on the website. |
| Output 1 | First Info day by 02/2021 It is too early to define external and internal risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Decision made on the date and venue for the Info day by 02/2020 2. Completion of draft of agenda sections by 02/2020 3. Circulation among the consortium members by 03/2020 4. Finalisation of the agenda sections by 03/2020 5. Invitations sent to speakers proposed by all partners by 04/2020 6. Finalisation of the agenda of the info-day 05/2020 7. Creation and Production of the Final Agenda, Flyer and relevant templates (certifications, list of attendants) of Infoday by 07/2020 8. Creation of the Info-day invitation by 07/2020 9. Compilation of the mailing list of the recipients of the invitation 07/2020 10. Send invitations to mailing list and press 08/2020 11. Upload event to social media and relevant updating by 08/2020 12. Press release to EU, National/local press for the forthcoming event by 09/2020 13. Press release and social media update after the info-day by 02/2021 |
| Output 2 | Final event (30/06/2021) It is too early to define external and internal risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Decision made on the date and venue for the Info day by 06/2020 2. Completion of draft of agenda sections by 06/2020 3. Circulation among the consortium members by 07/2020 4. Finalisation of the agenda sections by 07/2020 5. Invitations sent to speakers proposed by all partners by 08/2020 6. Finalisation of the agenda of the final event by 09/2020 7. Creation and production of the Final Agenda, Flyer and relevant templates (certifications, list of attendants) of the final event by 11/2020 8. Creation of the Info-day invitation by 11/2020 9. Compilation of the mailing list of the recipients of the invitation |

Annex B.2

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| | <p>11/2020</p> <p>10. Send invitations to mailing list and press 12/2020</p> <p>11. Upload event to social media and relevant updating by 12/2020</p> <p>12. Press release to EU, National/local press for the forthcoming event by 02/2021</p> <p>13. Press release and social media update after the info-day by 06/2021</p> |
| Output 3 | <p>Scientific Publications/Journal Articles throughout project implementation</p> <p>It is too early to define internal and external risks.</p> |
| Activities in logical order | <p>It is too early to define the specific activities in logical order, as these will come from the final version of the dissemination plan and will also depend on the flow of project results.</p> |
| Intended outcomes | <p>Dissemination and communication of EU JAV results to the scientific community and policy makers.</p> <p>Develop large scale awareness through traditional and new media</p> |
| Unintended outcomes | <p>Negative feedback from stakeholders opposing the project's approach and results (vaccine hesitant groups, scientists who share different research priorities and politicians/political parties with anti-vaccination agendas).</p> |



Logical framework

Work package 3

Evaluation

Date: January 21, 2019

Work package leader: FoHM, Sweden

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| <u>Specific objective 1</u> | Internal evaluation of processes and outcomes (ex-post and ex-ante) of the vertical work packages (WP5 to WP8) and processes of the vertical work packages of the JAV (WP1 to WP4) |
| Target 1 | Elaborated tools for monitoring processes and for evaluation of processes/outcomes are ready at M6 and described in the evaluation plan. Tools are usable by WPs. The purpose of a process evaluation tool: measuring positive/negative internal and external feedback. The overall purpose is at least twofold: the analysis of answers from WPs should provide useful information for WPs to do better and second, it should provide information for an effective risk management, i.e. if activities are in progress or finished and if the target is reached or possible to reach in time. Target groups are the WP teams and the consortium. |
| Indicator 1 | Elaborated process evaluation tool ready at M6. Measured by written comments sent by mail from WPs. |
| Indicator 2 | A description of the process evaluation tool is a part of the evaluation plan. Measured by the content of the evaluation plan. |
| Indicator 3 | Elaborated checklist tool for the monitoring of activities ready at M6. The tool is elaborated in cooperation with WP1. Measured by the operative checklist (already in use from M3). |
| Indicator 4 | Elaborated self-evaluation tool ready at M6. Measured by the content of the evaluation plan. |
| Indicator 5 | Elaborated baseline assessment tool ready at M6 and a part of the evaluation plan. Measured by the content of the evaluation plan. |
| Output 1 | <p>The process evaluation tool and the self-evaluation tool is one online survey or a mail survey with both close-ended and open-ended questions (approx. 15-20 questions in the process evaluation tool). The tool should be used for self-evaluations in WPs for evaluation by WP3 and for risk management by WP1. The data and analysis from the self-evaluation should be used in the WP3 evaluation. The tool should measure internal and external feedback, either fostering or constraining, with the purpose to give important signals from the environment and compare this with needs and expectations from stakeholders (a WP4 task) and from earlier surveys (Venice and the public online survey by DG SANTE).</p> <p>Internal risks for delayed output: WP3 are depending on collaboration with WPs. If they do not give feedback in time and/or the feedback is insufficient, it is obviously a risk for a delayed output or an output that is not optimal to reach the target.</p> <p>External risks for delayed output: If deliverance of data from WP4 survey is delayed or of insufficient quality, there is an obvious risk that, an analysis of expectations from stakeholders will be of insufficient quality.</p> |

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| Activities in logical order | <ol style="list-style-type: none"> 1. Establish an operational working group at FOHM for process evaluation tool. 2. Collect important information (empirical and methodological). 3. Elaborate questionnaire in collaboration with WP leads and with NIPH. 4. Finalise the tool and decide collection methods (online or by mail) <p>Start/end date: 1. M2-M3 2. M2-M3 3.M3-M5 4. M6.</p> |
| Output 2 | <p>The monitoring checklist tool (named activity reports) is used by the WPs for monitoring activities. The results should be used by WP leads and by WP3 in the process evaluation. The focus is laid upon “what and when questions”.</p> <p>Internal risks: see output 1 and in WP1</p> <p>External risks: Not relevant.</p> |
| Activities in logical order | <p>Comment: The tool is elaborated and already in use.</p> |
| Output 3 | <p>The self-evaluation tool is an adapted questionnaire that measure if targets are reached in each WP. The questions are based on the indicators in the logical frameworks and if a question is not answered with a yes-answer, an open question follows.</p> <p>Internal risks: Same as for output 1 (SO1, T1).</p> <p>External risks: Not relevant</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Establish an operational working group at FOHM for a self-evaluation tool. 2. Elaborate questionnaires for every WP. 3. Finalise the tool and decide collection methods (online or by mail). <p>Start and end dates: M3-M6</p> |
| Output 4 | <p>The baseline assessment tool aims to measure the situation and expectations in the start and in the end of JAV. The tool consists of indicators based on official statistics and of questions to program managers in countries participating in JAV. The tool is used to establish a baseline and to follow up statistics and questions at the end of the project.</p> <p>Internal/external risks: WP3 are depending on collaboration with WPs and program managers. If they do not give feedback in time and/or the feedback is insufficient, it is obviously a risk for a delayed output or an output that is not optimal to reach the target.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Establish an operational working group with NIPH 2. Elaborate questions aimed for program managers and validate the questions with at least one WP. 3. Finalise the BA-tool and deliver to WP1 for deliverance to WPs |

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| | Start and end dates: M2-M6 |
| Output 5 | <p>An evaluation plan with the following content: A brief introduction to the problems that the JAV aims to address, the research questions, description of methods, tools and time lines. Logical frameworks from every work package are appended to the evaluation plan.</p> <p>Internal risks for delayed output: Same as for output 1 (SO1, T1).</p> <p>External risks: Not relevant.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Confirm the logical frameworks of every WP; 2. Establish an operational working group at FOHM for elaborating a program theory of the JAV; 3. Confirm the research questions internally and with the coordinator; 4. Elaborate the evaluation tools (see other outputs); 5. Determine the scheme for activities; 6. Validate the plan with the coordinator and the WP leads; 7. Finalise the plan. <p>Start/end dates: M2-M6</p> |
| Intended outcomes | The intended outcomes analysing data from the process evaluation tool is at least two fold. The analysis of answers from WPs provides usable information for WPs to do better and second, it provides information for risk management and taken together they provide measures, which enhance the effectiveness. |
| Unintended outcomes | If data (answers to questions) are incomplete, the analysis are inconclusive. The analysis could be less useful if it is delivered too late to WPs. |
| Target 2 | The purpose of a tool measuring long-term effects (ready at M36): Provide a systematic framework for stakeholders on country level (i.e. program managers etc.) when planning, implementing and evaluating national, regional or local interventions with the aim to increase the vaccination coverage. Target groups are EU-JAV member states and stakeholders on country level. |
| Indicator 1 | Elaborated and approved tool is usable when planning, implementing and evaluating interventions according to target and ready at M36. Measured by documents describing the tool with criteria and checklist questions. |
| Indicator 2 | The tool is based on a framework that is used in behavioral science studies. Measured by references. |
| Output | An elaborated tool for planning, implementing and evaluating long term effects of interventions at local, regional or national level. The tool aims to measure activities and results on both individual and community /organizational level. Criteria and questions will be formulated. |

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| | Internal risks: If the feedback from WPs is uncomplete the development could be delayed and the result not optimal. External risks: The tool is not piloted in the project and the usefulness could be questioned. No planned support using the tool is given. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Establish an operational working group at FOHM. 2. Collect and analyze information how to generalize the tool without decrease the usability in a unique country. 3. Analyse and draw conclusions from relevant studies 4. Finalise the tool. <p>Start/ end dates: M7 – M35</p> |
| Intended outcomes | The long-term tool helps program managers and other practitioners to plan, implement and evaluate interventions in their respective country. A systematic use of the tool increases the comparability between countries. |
| Unintended outcomes | If the practical use of the long-term tool differs between countries, comparisons are difficult to accomplish. |

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| <u>Specific objective 2</u> | Evaluate the process of three general meetings of the project. |
| Target 1 | An elaborated tool will be used to collect relevant data in close connection to every general meeting with the purpose to enhance the effectiveness of the meetings. The target group is the whole consortium. |
| Indicator 1 | A tool is produced at M10. Measured by an elaborated questionnaire. |
| Indicator 2 | A tool is produced in connection to the second and the last meeting. Measured by two elaborated questionnaires. |
| Indicator 3 | Data are collected during three meetings. Measured by data files. |
| Indicator 4 | Three reports are published on the JAV website. The reports are based mainly on data collected at the meetings. Measured by report documents published on the JAV website. |
| Output 1 | <p>Two slightly different questionnaires are produced – one for the first meeting and one for the second and the last meeting. The questions cover following areas: relevance of the meeting (for WP tasks), possibility to solve problems during meeting, receiving relevant information from other WPs, and assessment of the meeting. A modified tool is produced and used at the second and the third meeting, with the purpose to evaluate all meetings. Reports from all meetings are published at the JAV website.</p> <p>Internal risks: Missing data or low response rates are probably a problem in the analyses.</p> <p>External risks: Not relevant.</p> |

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| Activities in logical order | <ol style="list-style-type: none"> 1. Establish a working group at FOHM; 2. Elaborate two questionnaires; 3. Validate the tool with WP1; 4. Finalise the tool. <p>Start/end dates: M7-M9</p> |
| Intended outcomes | Data from participants in the first meeting improve the next two meetings and data from the second meeting improve the last meeting. Data from all meetings are used in the evaluation of the meetings and for the overall evaluation and could be useful for other Joint Actions |
| Unintended outcomes | If data from participants are unspecified, the value is limited in the evaluation and for improvements |

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| <u>Specific objective 3</u> | Evaluate the EU-JAV globally and summarise results in reports. |
| Target 1 | The evaluation results in one midterm report and one final report. The midterm report focuses on the process evaluation findings with the purpose of improvement of the project. The final report focuses on both process evaluation findings and outcome evaluation findings, including the baseline assessment and gives a description of the long-term evaluation tool. The purpose of the final report is both constructive and conclusive and therefore increases the possibilities for shared lessons for learnings. Target groups are the consortium, EU-JAV member states, stakeholders and the public. |
| Indicator 1 | Production and dissemination of an evaluation report at M18. Measured by documents and the dissemination mail list. |
| Indicator 2 | Production and dissemination of an evaluation report summarising results including baseline assessment at M36. Measured by documents and the dissemination mail list. |
| Indicator 3 | A detailed description of tool for long-term evaluation is included in the final evaluation report. Measured by the document describing the tool and how it should be used. |
| Output 1 | <p>The midterm report will focus on the processes, interactions between processes and the external feedback, i.e. a constructive process evaluation.</p> <p>Internal risks: Data from all WPs should be ready to analyse at least 30 days before the meeting. The planning of the project has not taken this in account (e.g. D.1.3).</p> <p>External risks: Low response rates from surveys and/or vague external feedback that results in inconclusive analyses.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Collect and analyze all data from monitoring and process evaluation. 2. Write a report. |

Annex B.3

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| | <p>3. Revision made by Quality managers and WP3.</p> <p>4. Revision made by coordinator (WP1).</p> <p>5. Presentation of the midterm report at second meeting (M18).</p> <p>Start/end dates: activity 1: M6-M17; activity 2: M17; activity 3: M17; activity 4: M17; activity 5: M18</p> |
| Output 2 | <p>The final report will focus on A) the processes, interactions between processes and the external feedback, i.e. a constructive process evaluation and B) the outcomes of the project, i.e. both on a constructive and conclusive outcome evaluation.</p> <p>Internal and external risks are the same as for output 1.</p> |
| Activities in logical order | <p>1. Collect and analyze all data from monitoring, process and outcome evaluation and the baseline assessment and follow-up assessment.</p> <p>2. Write a report.</p> <p>3. Revision made by Quality managers and WP3.</p> <p>4. Revision made by coordinator (WP1).</p> <p>5. Presentation of the report at third meeting (M36).</p> |
| Intended outcome | <p>The final report gives opportunities for shared lessons for future planning, implementation and evaluation</p> |
| Unintended outcome | <p>A delay of the final report reduce the value of the findings and conclusions. The evaluation may be inconclusive if tools or other outputs are delayed. Evaluation could also be inconclusive if focus in conclusions is based on ex ante outputs. The conclusions on outcomes are mainly of ex ante character that give limited evidence.</p> |



Logical framework

Work package 4

Integration into national policies and sustainability

Date: February 5, 2019

**Work package leader: Ministry of Health (MoH),
France**

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| <u>Specific objective 1</u> | Establish the vaccine network which will be a platform for preparation of key decision-making and will ensure ways to leverage sustainability beyond the EU-JAV. Representatives from all EU-JAV MS and from other key stakeholders are part of the network |
| Target 1 | <p>Composition and role of the Vaccine network. The Vaccine network composed of two bodies: Member States Committee (MSC) and the Stakeholders Forum (SHF) is established at M6, terms of reference (ToR) is recognized, adopted by MSC, and publicly available. [An approved action plan is outlined at M12]. A secretariat supports the network with the agendas for meetings, minutes, action plan drafts, follow-ups.</p> <p>The target groups are the following actors: representatives of competent authorities (Ministry of health) of each of the 27 Member States of the European Union, representatives of competent authorities (Ministry of Health) of each of the 3 EU-JAV Associated countries (Bosnia, Serbia, Norway), major organizations and institutions having a legitimate interest in the Joint Action (WHO, EMA, OECD, ECDC).</p> |
| Indicator 1 | <p>A secretariat is established including 1 contact point from INSERM and other contact point from the Ministry of Health (M1-M2). Measured by documents (ToR available on the Extranet at the draft stage and on the public part of the Website when they are validated)</p> |
| Indicator 2 | <p>Elaboration of a list of stakeholders and member states representative to be part of the network: in collaboration with WP2 (M1-M4). Measured by information (on the Extranet at the draft stage and on the public part of the Website when they are validated)</p> |
| Indicator 3 | <p>Terms of reference of the Vaccine Network are available (M1-M5). Measured by document (on the Extranet at the draft stage and on the public part of the Website when they are validated)</p> |
| Indicator 4 | <p>Terms of reference of the Vaccine Network are adopted (M1-M6). Measured by document (on the Extranet at the draft stage and on the public part of the Website when they are validated)</p> |
| Indicator 5 | <p>Regular meetings held by the Vaccine Network (M6, M12, M24, M36). Measured by meeting agendas and minutes from meetings (on the Extranet at the draft stage and on the public part of the Website when they are validated)</p> |
| Output 1 | <ol style="list-style-type: none"> 1. A comprehensive list of actors that should be represented in the network. 2. A developed TOR-document adopted by MS and other stakeholders. 3. A scheme of regular meetings from M6 to M36. 4. A prioritization of work at the M12 meeting formulated in an action plan. <p>Internal/external risks: Not having on time all the representatives of each Member States and Stakeholders. Consequences: The Vaccine Network is not settled on time and a meeting cannot be held. Difficulties in performing the survey undertaken by ISS.</p> |

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| Activities in logical order | <ol style="list-style-type: none"> 1) Identification of stakeholders and member state representatives (M1-M2) 2) Invitation letter to Member States Committee (M1-M2) 3) Drafting of terms of reference (ToR) for the Network (M1-M5) 4) ToR for the Network adopted (M5-M6) |
| Intended outcomes | Active participation of the Members of the Vaccine Network, good representativeness of their Ministry of Health (MoH) commitment to support the main outcomes of the EU JAV in national policies |
| Unintended outcomes | <p>Low level of participation of the members of the Vaccine network, poor representativeness of their MoH, low commitment in the action plan.</p> <p>Consequences: The network has low efficiency in the work with the ToR which will affect the support for the main outcomes of the EU-JAV in national policies.</p> |

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| <u>Specific objective 2</u> | Develop a sustainable communication and cooperation on vaccine related policy questions that will be integrated into national policies. |
| Target 1 | Main outlines of the action plan has been developed at M12, based on a review of the main deliverables expected within the WP5 to 8 and based on needs and expectations from members of the network. The target groups are the members of the Vaccine Network and the WP leaders of the WP 5 to 8. |
| Indicator 1 | Review of the main deliverables described in the EU-JAV grant agreement performed at M6. Measured by a list of expected outcome |
| Indicator 2 | Survey among Members of the Vaccine Network about needs and expectations regarding vaccine policy launched at M6-M7. Measured by questionnaire sent to the Members. |
| Indicator 3 | Mapping of needs and expectations finalized at M9 measured by MoH. Measured by a list of vaccine policy topics to be considered in priority. |
| Indicator 4 | Indicators arising from the JA that are coherent with the vaccine topic considered by the Vaccine Network to be integrated in the action plan defined. Measured by the action plan on the Extranet at the draft stage and on the public part of the Website when they are validated. |
| Output 1 | <ol style="list-style-type: none"> 1. A report of the main deliverables of the WP5-8 M7 2. A report on the needs and expectations regarding vaccine policy M8-9 3. An action draft plan with main outlines based on indicators of the JAV, on MS needs and expectations ready at M12 |
| Activities in logical order | <ol style="list-style-type: none"> 1. Review of the main outcomes and deliverables of the JA Survey among the vaccine network Mapping of the needs and expectations 2. Draft versions of the mains outlines of the action plan are circulating for comment 3. Main outlines of the action plan adopted at M12 |

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| Intended outcomes | High level of collected outcomes regarding: vaccine hesitancy, harmonization of vaccine schedules and vaccine surveillance tools, vaccine supply and preparedness and vaccine R&D priority setting framework. Preliminary draft, including overview of the priorities identified by the MS and the outcomes and the deliverables of the WPs5-8 that need to be promoted at the national level (M30). |
| Unintended outcomes | Difficulties on defining the most relevant outcomes of the JAV to be integrated in the action plan. Not strong involvement of EU countries and of the WP5 to 8 leaders in development of the main outlines of the plan. |
| Target 2 | Action plan has been developed at M36, with agreed measures to ensure that there will be sustainable communication and cooperation between MS and non-EU JAV consortium member countries. The target group are the members of the Vaccine Network (MSC). |
| Indicator 1 | There is a final action plan sent to all members of the vaccine network. Measured by document with signatures by French MoH. |
| Output 1 | A final and validated recommendations version of the action plan based on the outputs from JAV. Action plan for sustainable cooperation on vaccine policy among EU MS with concrete public health actions to implement into national policies. Internal/external risks: Lack of consensus or weak consensus on the list of actions in the sustainable plan. |
| Activities in logical order: | <ol style="list-style-type: none"> 1. Conditional approval of Draft 2 report (M24 July 2020) 2. Preliminary draft 2 report (M30 January 2021) 3. Conditional approval final report (M35 June 2021) 4. Final report (M36 July 2021) |
| Intended outcomes | A sustainable communication and cooperation among Member States and other actors on vaccine related policies and question |
| Unintended outcomes | Difficulties on defining the most relevant outcomes of the JAV to be integrated in the action plan. Not strong involvement of EU countries and of the WP5 to 8 leaders in development of the main outlines of the plan (which worsens or at least does not improve the sustainable communication and cooperation). |

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| <u>Specific objective 3</u> | Implement pilot actions to explore the feasibility of joints undertakings applying “the integration into national policies and sustainability”-plan, with focus on three areas: educational activities targeting professionals, NITAGs collaboration and cooperation, and communication directed towards school children and young adults. |
| Target 1 | Pre- and in-service educational activities are implemented in medical and paramedical curricula on vaccines and vaccination programs for HCW and future HVW in Europe. Target groups are HCW and students under education to HCW in following EU MS and associated countries in JAV. |

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| Indicator 1 | Mapping of 'In service trainings' available in Europe mapped at M14. Measured by a questionnaire towards medical students (response rate/ the quantitative target for distributing the questionnaire to students) |
| Indicator 2 | An "in-service training" barometer installed at M18. Measured by the implementation of an electronic system aiming at evaluate vaccine hesitancy among HCW. |
| Indicator 3 | Criteria and tools for optimal in-service training developed at M30. Measured by information on the Extranet at the draft stage and on the public part of the Website when they are validated. |
| Indicator 4 | Sustainable guidelines for learning outcomes and work plan for immunization course is available for EU MS. Measured by a toolkit to be implemented in future HCW curricula at M34. |
| Output 1 | <ol style="list-style-type: none"> 1. An in-service training mapping showing the content of the course in vaccinology in the curriculum of medical students. 2. An in-service training barometer is implemented with the objective to measure vaccine hesitancy among HCW and mapping unmet needs in their training among a representative HCW. 3. A report on in-service vaccinology training will be delivered. 4. A list of criteria and tools (training module) will be provided to the MS to improve in-service training in vaccinology. 5. A pilot study will be performed to test the training module. 6. A toolkit for implementation a training module in the different MS is available. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Make an inventory of available "in-service training" in vaccinology (M1-M9). 2. Assess the need of in-service training of HCW in all Member States (M1-M9). 3. Develop in-service training barometer – define specifications (M9-M18). 4. Write a report on in-service vaccinology training. 5. Develop criteria and evaluation tools for optimal in-service training in vaccinology (M26). 6. Implement the training module in some countries as a pilot (M30). 7. A proposed tool kit for EU ministers in charge of curricula of future HCW (M34). |
| Intended outcomes | Standardized training module in vaccinology for HCW in Europe, Improvement of knowledge, behavior changes and confidence in vaccination among HCW and future HCW. |
| Unintended outcomes | The training module is inappropriate because of conflicts between standardization and country adoptions. |
| Target 2 | On M36 an interactive platform for discussion and advisory on policies, guidelines etc. Has been built with the purpose to strengthen the communication and cooperation between EU/EEA NITAG. The target group are: NITAGS, NITAGs chairman, Member States, NITAGS network (WHO), MSC. |

Annex B.4

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| Indicator 1 | <p>Identification of existing NITAG and identification of Chairman/person of these NITAG done at M3 through the Member States Committee (vaccine network). Measured by a list of relevant persons.</p> |
| Indicator 2 | <p>Identification of other stakeholders involved in NITAG collaboration at M3. Measured by a list of relevant stakeholders.</p> |
| Indicator 3 | <p>Legal framework and operational context of each EU NITAG collected at M12. Measured by list of relevant document from each EU MS.</p> |
| Indicator 4 | <p>Legal framework and operational context of each EU NITAG analyzed at M24. Measured by a mapping of these procedures.</p> |
| Indicator 5 | <p>A study looking at the information collected through a NITAG evaluation in each EU MS for a recent vaccine to be defined. Measured by a questionnaire.(The response rate/the quantitative target for distributing the questionnaire to NITAG)</p> |
| Indicator 6 | <p>A technical cooperation between some pilots NITAG. Measured by an operational framework.</p> |
| Outputs | <ol style="list-style-type: none"> 1. List of NITAG chairman in EU MS. 2. List of stakeholder involved in NITAG cooperation. 3. Compilation of all the EU NITAG legal framework and operational procedures. 4. Mapping (i.e., the output 3 is analyzed) of EU NITAG legal frameworks. 5. Platform available with all the tools and document needed for evaluation of a new vaccine. 6. Report including an operational framework for collaboration among all MS EU for the evaluation of a new vaccine. <p>Internal external risks: Poor involvement of NITAGs including NITAGs chairman, difficulties to collect information.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Identify stakeholder and NITAG chairman through email contacts. 2. Collect EU-level and national legal, technical frameworks and operational criteria for decision-making on vaccination policies (including HTAs) (M1-M3). 3. Perform a survey on the range of attributable costs and the tools used for the most recent MS-NITAG evaluations available (e.g. disease transmission, evidence-based results on efficacy and safety, and cost-effectiveness) (M6). 4. Analyze the survey and proceed to a mapping of all the national procedures. 5. Develop a platform with all the collected relevant documents. 6. Write the final report including an operational framework for NITAG collaboration (M36) |
| Intended outcome | <p>A strengthened collaboration and cooperation at the EU level for new vaccines in the future.</p> |

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| Unintended outcome | Collected information (Recommendation and guideline) for a NITAG collaboration are not workable for new vaccines in the future and will not ensure a sustainable cooperation at EU level. |
| Target 3 | An analysis of the evidence based behind the national immunization programs will be a base for a strengthened communication and cooperation between NITAGS. |
| Indicator 1 | Selection of 4 countries for a pilot study M2. Measured by a list of countries |
| Indicator 2 | Literature review on decision making and recommendation for single vaccine limited to the 4 countries M8. Measured by a review document on the Extranet at the draft stage and then on the public part of the Website when validated. |
| Indicator 3 | Interviews of NITAG members performed. Measured by a questionnaire (M1-M12).(response rate/ the quantitative target for distributing the questionnaire to NITAGs) |
| Indicator 4 | Recommendations for an extensive study Measured by minutes from meeting with an expert. |
| Indicator 5 | Implementation of an extensive feasibility study Measured by meetings and webseminar. |
| Outputs | <ol style="list-style-type: none"> 1. List of 4 pilot countries defined. 2. Report on the literature review. 3. Report on the quantitative study conducted among NITAG members. 4. Protocol for an extensive study. 5. Final report with recommendations arising from the feasibility study. <p>Internal/external risks: Poor involvement of the NITAG members, low participation of countries (below 12), unable to provide recommendation.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Selection of a small number of country to conduct the pilot study (M1-M18) 2. Selection of small number of vaccine for the pilot study (M1-M18) 3. Literature review (M1-M18) 4. Identification of stakeholders, representative of MS, NITAGS member to construct interviews. 5. Presentation of the pilot study results (M1-M18) 6. Presentation and decision on scope and methodology of extended study (M18-M36) 7. Results of all participating countries collected (M18-M30). 8. Final report evidence-base of National immunization programmes: analysis and recommendations (M30-M36). |
| Intended outcome | Better understanding of the rationale behind national immunization programme. |
| Unintended outcome | Lack of usable resources. Difficulties to compare the evidence-base considered by NITAGS and the rationale behind the decision-making regarding the introduction of new vaccines in National Immunization Programmes in the past 20 years. Difficulties on analysing the rationale underpinning vaccine schedules. |
| Target 4 | Increased awareness and tailored communication for young adults on the importance of vaccination in general and vaccination against HPV and |

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| | HBV through the use of the ECL youth ambassadors. The targets groups are the groups of Youth Ambassadors and young people living in the EU. |
| Indicator 1 | Engagement of the Youth Ambassadors in the project measured by the participation of the meetings. |
| Indicator 2 | Topic for a communication on HPV et HBV vaccines defined for communication in pilot countries. Measured by documentation on the the Extranet at the draft stage and on the public part of the Website when validated. |
| Indicator 3 | Raise awareness among Young people trough Annual competition targeting educational institutions during the European Immunisation week. Measured by participating educational institutions and how many pupils/students that are reached with activities |
| Outputs | <ol style="list-style-type: none"> 1. Annual workshop with Youth Ambassadors with training on vaccination. 2. Pilot campaign on vaccination in voluntary countries. 3. Annual competition on vaccination communication targeting young people. 4. Report on this communication. <p>External risks: Key messages and topics chosen are not clear. Misunderstanding. Consequences: The communication campaign does not impact the target group.</p> |
| Activities in logical order | <p>Workshop with Youth ambassadors with training and presentation on communication (M1-M18). Selection of topic to be communicate in some voluntary countries. Creation of games (support to communication) by the students for the annual competition. Launch the games and the communication during the European Immunization week (M20). A report on the communication pilot launched will be developed (M33).</p> |
| Intended outcomes | Overcoming vaccine hesitancy among young people and raise awareness on vaccination. Strong involvement of all stakeholder (young ambassadors, institutions present in the European Immunization Week, Schools), Public service announcements impacting. |
| Unintended outcomes | Indifference of the young people towards campaigns. Adverse effects. Low participation of young people, youth ambassador, low participation of people during the European Immunization Week, Games providing are not understood by the young people, the competition are not enough interesting young people, not really involved in the process or the thematic activities |



Logical framework

Work package 5

Immunization information systems to strengthen surveillance and increase vaccination coverage

Date: January 31, 2019

Work package leaders: SSI, Denmark, CIPH, Croatia and FoHM, Sweden

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| <u>Specific objective 1</u> | Assessment of interoperability of European immunization information systems (IIS) and opportunities for standardization, which also includes compliance of ISS with the new European Interoperability Framework |
| Target 1 | Assessment and agreement on assessment on data quality, collection processes and interoperability on IIS in at least 10 European countries using survey methodology and meetings with relevant registry and database owners. The target groups are EU-MS and partner countries. |
| Indicator 1 | Gathering information about IISs from partner countries through surveys, interviews and meetings from at least 10 countries. Measured by survey data |
| Indicator 2 | Compiled information is analyzed and sent for review and commenting to all participating partners. Measured by email documentation. |
| Output 1 target 1 | Survey on assessment of IIS interoperability and compliance with the New European Interoperability Framework and MMR coverage estimation M6 Risks: Information provided by partners not accurate or precise. Few responses from partners. |
| Activities in logical order | 1. A working group representing M2-4 partners gives input to the survey/interview guide on which questions to ask to obtain information on data quality, gathering and interoperability M4-M6. 2. Conduction of surveys and interviews with partners M6-M12. 3. Compiling, analysis and conclusions of data M12-M20. 4. Writing the report on ISS interoperability M20-M24. 5. Reviews from participating partners M24-M26. |
| Intended outcomes | Assessment report on IIS interoperability and compliance with the New European Interoperability Framework from at least 10 countries specifying the challenges and recommendations for improvement. |
| Unintended outcomes | Assessment report on IIS interoperability and compliance with the New European Interoperability Framework with lower response from partners than planned resulting in unreliable analysis and inability to specify recommendations for improvement. |
| Target 2 | Development of functional specifications for the pilot platform |
| Indicator 1 | Survey on assessment of IIS interoperability and compliance to the New European Interoperability Framework created. Measured by available survey document. |
| Indicator 2 | At least 10 partners completely responded to the survey. Measured by survey data |
| Indicator 3 | Functional specifications for pilot platform created and sent for review to all partners. Measured by email or intranet documentation. |
| Indicator 4 | Functional specifications for pilot platform reviewed and accepted by at least 6 partners. Measured by e-mail documentation |

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| Output 1 target 2 | Functional specifications for the pilot platform Risks: Delay in review of functional specifications leading to delay of adoption |
| Activities in logical order | 1. Conduction of surveys and interviews with partners M6-12. 2. Compiling and analysis of data provided by partners M12-M13. 3. Development of functional specifications for pilot platform M13-M15. 4. Functional specifications for pilot platform sent to review to all partners M15-M17 5. Functional specifications adopted according to partners' comments M18 |
| Intended outcomes | Functional specifications for pilot platform are agreed upon by at least 6 partners resulting in development of pilot platform. |
| Unintended outcomes | Functional specifications for pilot platform are not agreed upon resulting in delays and potential lower availability of country/regional coverages. |

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| Specific objective 2 | Establishment of a pilot platform for harmonized estimation of vaccination coverage in EU-MS and partner countries. |
| Target 1 | At least 6 partners have adopted the protocol M16. The target groups are EU-MS and partner countries. |
| Indicator 1 | Information on current methods for estimating MMR1 and MMR2 coverage has been obtained through a questionnaire and interview from at least 10 countries. Measured by survey and interview documentation. |
| Indicator 2 | The protocol has been sent for review to all partners in M13. Measured by email documentation |
| Output 1 target 1 | A protocol for harmonized estimations of vaccination coverage of MMR1 and MMR2 in children has been developed including definitions of variables to be included in the core data model and the protocol has been adopted by month 16. Potential risks: Delay in protocol review process, leading to delays in output. Too few countries can adopt the protocol |
| Activities in logical order | 1. Conduct of surveys and interviews with partners M6-12. 2. Protocol sent for review by M13 3. Protocol adapted according to partners comments M16 |
| Intended outcomes | Establishment of a pilot platform for harmonized estimation of vaccination coverage in EU-MS and partner countries that covers harmonized vaccination coverage data (MMR1 and MMR2) At least 6 countries are included [with a geographical spread] |
| Unintended outcomes | That few countries agree on the protocol and few country/regional coverage estimates are available. That cross-border coverage estimates are not possible. |

Annex B.5

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| Target 2 | A computer algorithm is developed and shared and accepted for tests by 6 partners on a pilot platform by M20. The target groups are EU-MS and partner countries. |
| Indicator 1 | A computer algorithm developed M20. Measured by documentation of the code eg. in R. |
| Indicator 2 | User guideline is developed by M 20 Measured by a guideline document. |
| Indicator 3 | Technical meeting with presentation of the algorithm has taken place at M21 Measured by documentation, including agenda, minutes and budget. |
| Output 1 target 2 | Computer algorithm and user guideline available d M20-21 Potential risks: Delays in development of the computer algorithm and the user guideline |
| Activities in logical order | <ol style="list-style-type: none"> 1. Computer algorithm and guideline distributed to all partners M21. 2. TC with presentation of the algorithm and test output 3. Technical support and advice for understanding and using the computer algorithm |
| Intended outcomes | See intended outcome above (target 1) |
| Unintended outcomes | Delays risk delaying the following work and may risk the final delivery |
| Target 3 | At least 4 countries are providing MMR coverage data for the pilot study by month M22-M26. At least two neighbouring countries provide subregional data by month M22-M26. |
| Indicator 1 | At least two neighbouring countries provide sub-regional data. Measured by output on the platform, screen dump. |
| Indicator 2 | MMR coverage data displayed by region at the pilot platform for participating countries. Measured by output on the platform, screen dump. |
| Indicator 3 | Data has been updated at least twice by at least 4 partners. Measured by output on the platform and log-files. |
| Output 1 target 3 | Report about standardized estimations of vaccination coverage M26-M30. Potential risks: Few partners provides data, Cross-border estimates are not available Coverage estimates are different from benchmark Technical problems with the platform |
| Activities in logical order | <ol style="list-style-type: none"> 1. Partners run the MMR coverage algorithm and provide data for the platform M22-M26. 2. Experience with the pilot study is described in a report M26-30. 3. Report is shared among partners for review M29-30. |
| Intended outcomes | A test of a pilot platform is implemented and assessed. |
| Unintended outcomes | Problems described in outputs above will risk the possibilities of establishing the pilot platform. |

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| <u>Specific objective 3</u> | To describe existing European reminder and recall systems and to make recommendations on how reminder systems can be developed in EU-MS and partner countries |
| Target 1 | Description of different approaches of organization, distribution channels used, timing and frequency of reminding. Identification of key barriers for the implementation of vaccine reminder system. Recommendations for the optimal use of existing systems and the development of future reminder systems. The target groups are the EU MS, partner countries and stakeholders |
| Indicator 1 | At least 10 partners have contributed to the survey/interview by M26. Measured by e-mail documentation. |
| Indicator 2 | At least 6 different approaches for reminder and recall systems currently used in Europe has been described by M3. Measured by report results. |
| Indicator 3 | The results of the survey has been shared with partners by M33. Measured by an e-mail list. |
| Output 1 | Final report with description of European reminder systems for vaccinations, the most important barriers for implementations of reminder systems and how the future reminder systems should be designed, submitted M34-M36. External/internal risks: Too early to consider internal and external risks. |
| Activities in logical order | Development of questionnaire/interview guide for survey by M18 - 20 Presentation of survey on technical meeting in M21. Conduction of survey/interviews M22-26. Draft report circulated to all partners M34. |
| Intended outcome | The recommendation is a basis for the development of a reminder system in MS and partner countries. |
| Unintended outcome | In addition to SSI only 3 other partners are contributors to this task and there might be too few answering the questionnaire. Not possible to get an overview of reminder systems and how future systems can be designed. |

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| Specific objective 4 | To perform a feasibility study as a base for a future coordinated cross-border measles vaccination campaign in the EU and associated countries. |
| Target 1 | Analyse and map main target groups for a possible measles vaccination campaign per country included in EU JAV, based on MMR coverage data from task 5.2 and country knowledge (M36). |
| Indicator 1 | Country-specific data on MMR coverage. Measured by survey data. Also see specific objective 2, above. |
| Indicator 2 | Target groups and geographical areas are identified. Measured by survey data. Also see specific objective 2, above. |

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| Output 1 target 1 | A report is produced with analysis and conclusions about population groups and areas of specific interest for efforts to increase coverage identified, i.e. areas with low or decreasing coverage (MS25, M36). Also see specific objective 2, above. Possible risks (internal/external) for delayed output: Non-compliance by partners. Data relevant for the project not readily available. Time frame too ambitious. |
| Activities in logical order | 1. Consult relevant persons in charge of immunization programs in respective country in order to get access to relevant data on immunization coverage (M12-15). 2. Official statistics on vaccinations obtained (WHO, ECDC, MoH, Eurostat etc) (M12-15) 3. Compilation and analysis of the data obtained providing a baseline for the cross-border campaign plan (Target 2-3) (M18-24). |
| Intended outcomes | Sufficient information obtained for planning of a cross-border vaccination campaign. |
| Unintended outcomes | Campaign not planned/performed due to unforeseen problems, e.g. collaborative issues, insufficient funding, staff situation, vaccine logistics etc. |
| Target 2 | Identify structures, criteria and funding needed for a coordinated cross-border measles vaccination campaign in 2021, including existing immunization activities that need to be completed (i.e. existing campaigns, routine immunisation, school/work vaccination). |
| Indicator 1 | A project team to lead the planning of the campaign is formed. Measured by list of members. |
| Indicator 2 | A planning group consisting of members of the JAV partners to participate in the campaign is formed. Measured by list of members. |
| Indicator 3 | Work plan developed by the project team and the planning group. Measured availability of work plan |
| Indicator 4 | Technical planning meetings held according to work plan Measured by meeting notes. |
| Indicator 5 | Information gathered about existing campaigns etc (as in target). Measured by correspondence, official websites etc. |
| Indicator 6 | Necessary information obtained from key stakeholders for the planning process (see targets 1 & 3) Measured by no. of interviews and correspondence. |
| Indicator 7 | Criteria for the campaign established (through indicators 1-3) and compiled in a planning document. Measured by availability of planning document. |
| Output 1 target 2 | Campaign plan and budget drafted (MS25, M36). |
| Activities in logical order | 1. Technical planning meeting (Zagreb, M6) to define the work process including how to establish planning and project groups for feasibility study. 2. Carry out work in the planning and project groups (start M6). 3. Gather information about existing campaigns and what is to be learnt from earlier campaigns etc (as in target), as measured by correspondence, official websites etc. (M7-15). |

Annex B.5

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| | <p>4. Perform interviews with key stakeholders for the planning process (see targets 1 & 3) (M7-12).</p> <p>5. Establish criteria for the vaccination campaign (through indicators 1-3) and compile in a planning document (MS25, M36).</p> |
| Intended outcomes | See above, target 1. |
| Unintended outcomes | See above, target 1. |
| Target 3 | Explore the willingness in EU and associated countries for a joint cross-border measles immunization campaign, across ages and EU and associated countries. |
| Indicator 1 | Interview guide and, if needed, questionnaire developed. Measured by availability of documents. |
| Indicator 2 | Key stakeholders interviewed. Measured by structured notes. |
| Output 1 target 3 | Data on willingness to participate in a joint cross-border measles immunization campaign. Possible risks (external/internal) for delayed output: Non-willingness to participate. Time frame too ambitious. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Key stakeholders identified and agreed to be interviewed (M7-9). 2. Interviews scheduled and performed (M7-12). 3. Data obtained from interviews analysed and compiled (MS25, M12). |
| Intended outcomes | Information indicating that a cross-border vaccination campaign would be feasible. |
| Unintended outcomes | Responses indicating that a cross-border campaign is not possible to perform. |
| Target 4 | Report to JAV partners of findings of targets 1-3 in a final strategic document for the conduct of a cross-border measles vaccination campaign (M36). |
| Indicator 1 | Final report delivered (D5.5, M36). |
| Output 1 target 4 | Cross-border measles vaccination campaign report (D5.5, M36). Possible risks (external/internal) for delayed output: Too early to consider internal and external risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Drafting of the final report (M34). 2. Circulating of the report for feedback (M35-36). 3. Report uploaded on JAV webpage (M36). |
| Intended outcomes | Complete planning document for a cross-border measles vaccination campaign available. |
| Unintended outcomes | Report incomplete due to insufficient information or participation. |



Logical framework

Work package 6

Vaccine supply and preparedness

Date: January 31, 2019

**Work package leaders: ISS, Italy and FHI,
Norway**

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| <u>Specific objective 1</u> | Improve mapping of needs and vaccine demand at European level in consortium member states, to ensure adequate availability of high quality vaccines, and define basic principles for vaccine demand planning and forecasting and other issues related to preparedness based on experiences. |
| Target 1 | By M12, a survey collecting data on previous (last 3 years) and current vaccine shortages and response at the national and European level, and on vaccine procurement modalities, from a representative sample of JAV participating countries, is completed (including analysis and report). Data will be collected from the MSs through the collaboration with MS's country procurement and supply units. By M12 Information will also be collected from other relevant stakeholders, such as national regulatory agencies and product manufacturers. Target groups are the consortium member states |
| Indicator 1 | A list of key stakeholders is elaborated. Measured by a list of stakeholders. |
| Indicator 2 | A questionnaire to be administered to MS is available and has been forwarded to MS. Measured by available questionnaire and email correspondence. |
| Indicator 3 | A representative sample of JAV participating countries have completed the survey. Measured by information in the report, based on the survey. |
| Indicator 4 | A report on previous experiences (last 3 years) and current state of vaccine shortages and responses of EU countries is completed. Measured by a report published on the official website or on the intranet |
| Output 1 | Report on previous experiences on vaccine shortage and response at national and at European level, and on vaccine procurement modalities in the Member States, by M12. Risks: Delayed (or no) response to the surveys could lead to a delayed output (report). |
| Activities in logical order | <ol style="list-style-type: none"> 1. From M3 to M6, prepare a list of key stakeholders in MS, and industry (EFPIA) from whom to collect relevant documents. 2. From M3 to M6, develop a survey together with Task 6.2 and pilot test it among selected EU JAV partners with the purpose to validate questions. Make suggested changes to survey. 3. From M7 to M8, administer survey to all key stakeholders identified. 4. From M9 to M10, analyse survey results and integrate with other sources of information. 5. From M11-to 12. Prepare report. |
| Intended outcomes | The survey will allow us to describe the problem of vaccine shortages in EU Member States and the responses at national and EU level. |
| Unintended outcomes | Non representativeness of results because of low response rate. Incomplete information because of lack of motivation of participants. |
| Target 2 | By M24, an evaluation of financing mechanisms for purchase and stocks of vaccines in at least 10 consortium member countries, with the purpose to identify sustainable solutions for a centralized procurement. The target groups are the consortium member countries. |

Annex B.6

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| Indicator 1 | A report on the financial mechanism for centralized procurement is available. Measured by a report. |
| Indicator 2 | Evaluation is based on financing mechanisms in at least 10 countries. Measured by data in the report (see indicator 1). |
| Output | Report on financial mechanisms for centralized procurement and analysis of the financing mechanisms to ensure sustainable supply for the purchase of vaccines, by M24 Risks: Delayed (or no) response to the survey could lead to a delayed output (report). |
| Activities in logical order | <ol style="list-style-type: none"> 1. From M13 to M17, collect information from MS about local financing mechanisms. 2. From M18 to M20, analyse procurement mechanisms and systems in place in MS. 3. From M21 to M22, identify best solution for sustainable purchase and stock of vaccines. 4. From M23 to M24, write report. |
| Intended outcomes | The collected information will allow us to propose solutions for sustainable purchase and stock of vaccines |
| Unintended outcomes | Low response rate. No viable solutions identified. |
| Target 3 | By M30, elaborate procedures and methods to estimate needs and procurement of vaccines in consortium member countries in the short and long-term. Procedures and methods will be validated by at least 50% of participating countries (including Northern, Central and Southern MS and if possible countries that have legal vaccine mandates) and once validated will be made available to all consortium members. Target group are all consortium members. |
| Indicator 1 | Procedures and methods validated by at least 50% of participating countries. Measured by documents from participating countries |
| Indicator 2 | Guidelines are available to all consortium members. Measured by guideline documents available on the JAV-intranet |
| Output | Guidelines on procedures to estimate vaccine needs and procurement in EU by M30 Risks: Collected information is not sufficient or the modalities to estimate vaccine needs and procurement procedures is so different among EU and consortium member countries so that it is not possible to define common basic principles to estimate needs and procurement of vaccines in the short and long-term. |
| Activities in logical order | <ol style="list-style-type: none"> 1. From M12 to M20, literature review on vaccine demand and forecasting and centralized procurement. 2. From M20-M24, identify criteria and data to estimate demand. 3. From M24-M30, write guidelines. |
| Intended outcomes | Make available guidelines to estimate vaccine needs and improve procurement in the short and long-term. |
| Unintended outcomes | Difficulties in implementing guidelines |

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| <u>Specific objective 2</u> | Reinforce mechanisms of management of forecasting, supply and stocks. |
| Target 1 | By M12, Understanding mechanisms for defining the anticipated needs (i.e. geographical issues) to ensure sufficient size of supply and stockpiles, including their sustainability. The target groups are MS, to the JAV associated countries and stakeholders. |
| Indicator 1 | A list of key stakeholders is available for the WP to collect relevant documents and respondents to the Survey is developed. Measured by a list of stakeholders |
| Indicator 2 | A questionnaire to be administered to relevant respondents in MS is available and has been circulated to the MS. Measured by available questionnaire and email correspondence. |
| Indicator 3 | A plan developed with industry and other stakeholders to anticipate changes in vaccine recommendations and gain critical information to ensure preparedness is available. Measured by documents on the intranet. |
| Output 1 | Report on mechanisms for defining the anticipated needs (i.e. geographical issues) to ensure sufficient size of supply and stockpiles, including their sustainability by M12. It is too early to consider internal and external risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Prepare a list of key stakeholders in MS, industry from whom to collect relevant documents. End date: M7 2. Develop a survey and pilot test it among selected EU JAV partners. Make suggested changes to survey. End date: M6 3. Administer survey to all relevant stakeholders in EU MS. End date: M7 4. Analyze survey results and integrate with other sources of information. 5. Write report. End date: M14. |
| Intended outcomes | Reinforce mechanisms of management of forecasting, supply and stocks to ensure sufficient supply for immunization programs and preparedness in EU |
| Unintended outcomes | Low response rates and/or low validity of data will limit the understanding of the mechanisms and therefore defining the anticipated needs. |

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| <u>Specific objective 3</u> | Explore the feasibility and develop a concept for an EU data warehouse for sharing of vaccine supply and demand data/information among dedicated stakeholders. |
| Target 1 | By M18, A gap and option analysis (concept analysis) on the possibilities for a regional or European virtual stockpiles on vaccine management needs and stocks has been performed. The target groups are MS, to JAV associated countries and the stakeholders. |
| Indicator 1 | The methodology has been validated with the working group. Measured by email correspondence. |
| Indicator 2 | Results of the Survey and other sources of information (e.g. literature review and consultation with stakeholders) are available and feeds into the concept analysis. |

Annex B.6

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| | Measured by data from survey and documented feedback from stakeholder consultations. |
| Indicator 3 | Critical assessment of options and possible scenarios for the concept analysis has been performed. Measured by a report. |
| Output 1 | Report on possibilities, gaps and options for building a “concept type” for regional or European virtual stockpiles, by M18. It is too early to consider internal and external risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Validating the methodology. End date: M6 2. Review of other sources of information and projects to feed into the work with the report. End date: M9 3. Consolidating results of the Survey and other sources of information to feed into the concept analysis. 4. Critical assessment of options and possible scenarios for the concept analysis. End date: M12 <p>Write report. End date: M18</p> |
| Intended outcome | Develop a concept for an EU data warehouse for sharing of vaccine supply and demand data/information |
| Unintended outcome | See unintended outcome target 1, specific objective 2. |
| Target 2 | By M36, the knowledge gained from the work in task 6.2 (the mechanisms for defining the anticipated needs and the concept analysis) is used to develop a recommendation on mechanisms of management of forecasting, supply and stocks |
| Indicator 1 | Critical elements for the recommendations identified and agreed upon in the working group. Measured by documents on the JAV-intranet and a final recommendation published on the official website |
| Indicator 2 | Options and possible scenarios developed. Measured by documents on the JAV-intranet and a final recommendation published on the official website |
| Indicator 3 | Critical assessment of options and possible scenarios has been performed. Measured by documents on the JAV-intranet and a final recommendation published on the official website |
| Output 1 | Final report and recommendation on mechanisms of management of forecasting, supply and stocks by M36 has been developed. It is too early to consider internal and external risks. |
| Activities in logical order | <ol style="list-style-type: none"> 1. Review of the sources of information to feed into the work with the report 2. Assessment of the different scenarios by Working group and consultation with Stakeholders 3. Development of the recommendation. End date: M30 4. Write report. End date: M36 |
| Intended outcome | Develop a recommendation on mechanisms of management of forecasting, supply and stock. The MS have agreed upon the recommendation and it is used operatively. |
| Unintended outcome | The recommendation is not agreed by the MS and therefore not functioning operatively. |



Logical framework

Work package 7

Vaccine research and development
priority setting framework

Date: November 30, 2018

**Work package leaders: INSERM, France and FHI,
Norway**

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| <u>Specific Objectives</u> | <p>1. Tools and methods for priority-setting for vaccine and vaccination research are defined.</p> <p>2. Financial [and other] mechanisms are identified that increase technical collaboration and cooperation on research funding on vaccine and vaccination research among MS.</p> <p>3. Half of research topics from the prioritized list used by international and national funding programmes within the 5 years following the end of the project.</p> |
| Target 1 | <p>Evidenced-based tools and methods, based on the Multi-criteria decision analysis (MCDA) methodology, are developed with the purpose to identify and prioritize vaccine and vaccination research in EU.</p> <p>Target groups are international and national research programmes, MS research institutions, civil society, charitable organizations and the vaccine industry.</p> |
| Indicators target 1 | <p>1. A detailed description of tools and methods for prioritizing vaccine and vaccination research (measured by availability of documents) at M18</p> <p>2. A first annual detailed list of vaccine and vaccination research priorities for the 3-6 pilot vaccines at M24 (measured by the document First Annual list)</p> <p>3. A second detailed list of vaccine and vaccination research priorities beyond the pilot vaccines at M34 (measured by the document Second Annual list)</p> |
| Output 1 target 1 | <p>Through a survey of WP7 collaborators (conducted at M2) following by information to JAV partners (at M3), a list of 3-6 different vaccines used in different stages of life, are selected (at M5) to be used as pilots for the development of the research prioritization framework.</p> <p>Internal risk: possible disagreement on pilot vaccines chosen by the working group. Will be mitigated through consultation throughout the process.</p> |
| Activities in logical order | <p>1. Consult WP7 team through email on first draft list of vaccines eligible for participating in the pilot to (M2 to M3)</p> <p>2. Consult JAV partners through email on WP7 summary list of vaccines eligible for participating in the pilot to (M3 to M5)</p> <p>3. Produce report for JAV website on final list of pilot vaccines (M6)</p> |
| Output 2 target 1 | <p>Concept framework for decision-making on research priorities:</p> <p>1. A literature review on prioritization methodologies is available on M4 to validate the proposed tools and methods.</p> <p>2. Through consultation of stakeholders and JAV partners a summary list of research topics is finalized at M10</p> <p>3. A list of weighed criteria is established through expert consultations and available at M14</p> |

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| | <p>4. A report is posted on the JAV website on Guidelines/Best practices to establish priorities for vaccine and vaccination research to increase vaccination coverage</p> <p>Internal risk: WP7 is not successful in convening the right level of expertise. Will be mitigated through consultation of MS participating in JAV.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Map existing priority setting tools used for research available and choice of most appropriate method (M1 to M6) 2. Prepare roster of experts and stakeholders for each part of the prioritization process (M3 to M5) 3. Finalize list of research topics through stakeholder consultation (M8 to M10) 4. Produce list of criteria through email consultation (M6 to M10) 5. Produce list of weighted criteria through expert consultation to enable finalization of the concept prioritization framework (M10 to M14) |
| Output 3 target 1 | <p>The concept framework finalized at M14 is applied to the list of research topics for the pilot vaccines, to be finalized at M10. This will result into the first annual priority list (at M24).</p> <p>Internal risk: WP7 is not successful in convening the right level of expertise. Will be mitigated through early consultation of MS participating in JAV and stakeholders.</p> <p>External risks: The list of priority is un-noticed by our targets. Will be mitigated by appropriate communication through WP2.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Convene face-to-face expert consultation to apply concept prioritization framework to the list of research topics (M15 to M20) 2. Produce report on first prioritized list of research topics for the EU (M21 to M24) |
| Output 4 target 1 | <p>The concept framework is applied to the list of research topics extended to all vaccines used by MS. This will result into the second annual priority list (at M34).</p> <p>Internal and external risks: Same as for Output 3</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Review and update list of research topics to ensure applicability to the broader set of vaccines used in the EU (M25 to M30) 2. Convene face-to-face expert consultation to apply concept prioritization framework to the list of extended research topics (M25 to M30) 3. Produce report on first prioritized list of research topics for the EU (M31 to M34) |
| Target 2 | <ol style="list-style-type: none"> 1. Financial mechanisms are identified with the purpose to cooperate among EU MS to fund key vaccines and vaccination research along the value chain, and according the prioritization (annual list 1 and 2) in EU. Target groups are international and national research funders, MS, the European Commission, the vaccine industry and charitable organizations 2. Mechanisms are identified with the purpose to strengthen collaboration in key vaccines and vaccine research in EU. Target |

Annex B.7

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| | groups are international and national programmes, MS research institutions and the vaccine industry. |
| Indicator target 2 | <ol style="list-style-type: none"> 1. Report available on a proposal for a shared funding mechanism in the EU for vaccine and vaccination research priorities on M24 2. Report available on first annual priority list with funding opportunities on M34 |
| Output 1 target 2 | <p>Mapping is completed and available on the JAV website at M11 of existing and possible funding mechanisms for identified priorities along the value chain.</p> <p>Internal risk: uncomplete identification of existing funding mechanisms by the working group. Will be mitigated through extensive consultation throughout the process.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Validate the proposed methodology (M2 to M4) 2. Plan consultations and develop a survey to identify existing and possible funding mechanisms (M5 to M6) 3. Map existing and possible funding mechanisms (M6 to M11) 4. Produce report on critical assessment of existing and possible funding mechanisms, gaps and hurdles for potential cooperation. available (M11 to M15) |
| Output 2 target 2 | <p>Report on a proposal for shared funding mechanism (at M36). This report results from consultations of experts, institutions and companies and mapping of existing and possible funding mechanisms.</p> <p>External risk: The funding proposal is unrecognized by our targets. Will be mitigated by in-depth discussion with the EC.</p> |
| Activities in logical order | <ol style="list-style-type: none"> 1. Map alternative funding mechanisms (M12 to M22) 2. Finalize report on alternative funding mechanisms (M24 to M36) |
| Intended Outcome (targets 1 and 2) | Incorporation of identified prioritized research topics in international and national funding programmes |
| Indicator intended outcome | Half of research topics from the prioritized list used by international and national funding programmes within the 5 years following the end of the project |
| Unintended outcome (targets 1 and 2) | Addressing vaccination coverage through research is seen by policy-makers as too long-term, which decreases funding availability further. Inability to identify a funding mechanism that is specific and attainable with existing resources. |



Logical framework

Work package 8

Vaccine hesitancy and uptake. From research and practices to implementation.

Date: January 18, 2019

Work package leaders: THL, Finland and ISS, Italy

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| <u>Specific objective 1</u> | To develop a systematic overview and analysis of the current situation, including best practices, lessons learned and experiences of implementing into action research-based knowledge concerning vaccine hesitancy and uptake in: Member States, among stakeholders and partners, in the research community, and among policy makers |
| Target 1 | The best practices and lessons learned in vaccine hesitancy-related work in the MS and their regions and among stakeholders and partners, research community and existing and ongoing projects and programmes are systematically overviewed and reported by M36 (July 2021). |
| Indicator 1 | Elaborating a list of key stakeholders and partners together with the participants by M11 (June 2019). |
| Indicator 2 | To have conducted mapping of best practices and lessons learned in the MS and their regions using a web-based survey tool. 50 per cent of the MS mapped within the EU-JAV by M24 (see also Target 2) (July 2020). (measured by documents) Because of a high variability of vaccination coverage by the vaccine antigen, the sample consists of Northern, Central and Southern MS, including countries that have legal vaccine mandates (such as France and Italy). |
| Indicator 3 | To have conducted in-depth interviews with at least 50 per cent of MS complementing the surveys by M24 (see also Indicator 2) (July 2020). (measured by documents) |
| Output 1 | JAV participants and stakeholders have received ‘country reports’ on the research-based determinants behind high and low vaccination coverage identified in the region. First reports ready by M16 (December 2019). One external risk is low response rate and a poor representability of the data. This could result in low use (unintended outcome). Another external risk that might affect the overall use of the data is lack of communication and marketing of the reports. |
| Activities in logical order | M6 (January 2019): TC with task 8.1 participants on data gathering tools. M6 (January 2019): mapping tools (survey and toolkit for interviews ready). M8 (March 2019): Webinar presenting the activities for potential partners and stakeholders whose activities could be mapped within task 8.1. M11 (June 2019): Template for country reports ready. M12 (July 2019–M36 (July 2021): Elaborating country reports. M36: Conducting final report. |
| Intended outcomes | Communicating knowledge on effective methods between MS and to other countries. |
| Unintended outcomes | The main target groups are the Member State representatives responsible for the NIPs in the respective country/region. Secondary targets groups are key stakeholders and partners, research community, and policy makers that work with vaccine hesitancy related issues in a specific country/region. The diversity of target groups can, and the fact that NIPs are not managed by one, central authority in all Member |

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| | States, increases challenges for the data gathering, as comprehensive and reliable data can be challenging to obtain. |
| <u>Specific objective 2</u> | To provide guidance for developing practices and policies for maintaining good vaccine uptake in general and for supporting public health responses to hesitancy by creating mechanisms and tools for disseminating research-based knowledge and best practices and lessons learned throughout Member States |
| Target 1 | An online working environment (e-learning platform) is developed to provide research-based knowledge and best practices and lessons learned for Member State and stakeholder actors working with NIPs throughout Member States and Non-MS participating in JAV. |
| Indicator 1 | E-learning platform launched M11 (July 2019). |
| Indicator 2 | Reports produced in 8.1 and other materials and information from other WPs are uploaded on the platform between M16 (December 2019) and M36 (July 2021). |
| Indicator 3 | A discussion area is functional on the platform by M16 (December 2019). |
| Indicator 4 | A database is functional on the platform by M16 (December 2019). |
| Output 1 | The technical work with the online platform is completed M16 (December 2019). |
| Activities in logical order | M06 (January 2019): Identify critical issues with respect to GDPR. M6 (January 2019): TC with WP8 participants about the design of the online platform. M7 (February 2019): Mapping of the need for the platform ready. M7 (February 2019): Start technical development of the online platform M16 Launch of the platform |
| Intended outcomes | Communicating knowledge on effective methods for strengthening vaccination coverage in MS and among stakeholders. |
| Unintended outcomes | The work process and launch of the platform is delayed due to technical and formal difficulties. |
| Output 2 | EU-JAV participants and stakeholders take part of the information on the platform starting M17 (January 2020). (Measured by Appraisal report on dissemination tools and activities M33 (April 2021), measuring both quantitative and qualitative values on platform use.) |
| Activities in logical order | M16 (December 2019): Share reports produced in 8.1 (bi-annual) M18 (February 2020): Webinar presenting the online platform for potential users. M22 (May 2020): Share reports produced in 8.1 (bi-annual) M28 (December 2020): Share reports produced in 8.1 (bi-annual) M34 (May 2021): Share reports produced in 8.1 (bi-annual) |
| Intended outcomes | Information on the platform is used and implemented in MS and among stakeholders. |
| Unintended outcomes | Information on the platform is not used or not considered usefull due to poor quality of data or lack of information about the information and platform. |
| Output 3 | EU-JAV participants and stakeholders produce video lectures or webinars on the platform. |

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| Activities in logical order | <p>M16 (December 2019–M18 (February 2020): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> <p>M19 (March 2020–M21 (May 2020): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> <p>M22 (June 2020–M24 (August 2020): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> <p>M25 (September 2020–M27 (November 2020): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> <p>M28 (December 2020–M30 (February 2021): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> <p>M31 (March 2021–M33 (May 2020): At least, one video lecture or webinar produced by participant, partner or stakeholder on the platform.</p> |
| Intended outcomes | Taking part and implementing knowledge on effective methods through the online platform. |
| Unintended outcomes | <ul style="list-style-type: none"> • The platform is not used effectively resulting in poor dissemination of knowledge and weak effect. • Conflicts in messages from different producers. • Low quality of the products. |

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| <u>Specific objective 3</u> | Detection of early signals of lowering public confidence in real time and monitoring over time and space (geographic differences within EU) of the sentiment, opinions and attitude towards vaccination in real time. |
| Target 1 | By M30, finalize a report on frameworks and methods for A) detecting early signals of lowering public confidence in real time; B) monitoring over time and space the opinions etc towards vaccination. At least 20% of the participating countries are involved in identifying vaccine-related topics and keywords. |
| Indicator 1 | A detailed description of most reliable tools for monitoring public sentiment on vaccines on the web in real time are available (measured by a document) |
| Indicator 2 | At least 4 countries participating in the project, by M3 |
| Indicator 3 | A list of at least 10 topics agreed upon by at least 3 countries and translated in at least 3 languages, by M6 |
| Indicator 4 | A list of at least 100 key words agreed upon by at least 3 countries and translated in at least 3 languages, by M6 |
| Indicator 5 | A confidential report on collective attention data analysis and on the Immunization Opinion and Sentiment Analysis Framework and Methods is available, by M30. |
| Output 1 | List of all available tools for monitoring public sentiment on vaccines on the web in real time (e.g. Twitter, Facebook, Health Map, Google trends, Google adwords, etc). Internal and external risks not yet identified |
| Activities in logical order | From M1 to M6: Scoping review of available tools in the literature and on the web directly |

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| | Identify experts in real-time data monitoring Contact experts to collect information on different experiences and on the tools available Evaluate available tools and draw a list of the most relevant tools |
| Output 2 | List of countries that will participate in the selection of topics and validation of the vaccine-related keywords. Internal and external risks not yet identified |
| Activities in logical order | By M3, send a questionnaire to all participating countries to identify which activities they would like to be involved in and identify which of the countries is interested in the selection of topics and validation of the vaccine-related keywords for vaccine confidence monitoring |
| Output 3 | List of at least 10 topics and 100 key words agreed upon by at least 3 countries in at least 3 languages. Internal and external risks not yet identified |
| Activities in logical order | By M6, identify vaccine-related topics in English and key words that will be monitored in three EU languages, From M6: Contact project partners that agreed to contribute, to validate the list of topics From M7: Translate the topics in the relative languages M9: Final validation of the translated topics by evaluating the research volumes |
| Output 4 | Written report, Internal and external risks not yet identified. |
| Activities in logical order | Analyse collective attention data from selected data visualisation tools Prepare draft report Share report with participating countries for comments Finalize report by M30 |
| Intended outcomes | See intended outcomes target 2 |
| Unintended outcomes | See unintended outcomes target 2 |
| Target 2 | By M24, a public vaccine confidence monitoring platform is completed and delivered. The target groups are the general public in EU and in other countries, professionals in health care, policy makers. |
| Indicator 1 | Agreement reached, among group of countries working on this activity, on the main characteristics of the web platform for the integration and visualization of different data (European/ country-specific platform? open/ limited access? features of platform), by M6. |
| Indicator 2 | Existence of a written description of the main features of the web platform. |
| Indicator 3 | A vaccine confidence monitoring platform freely accessible is available by M24 |
| Output 1 | Web platform concept for the integration and visualization of different data. Internal and external risks not yet identified |
| Activities in logical order | Identify the tool according with WP2 premises Contact project partners, that agreed to contribute, to validate the tool and visualization methods in different languages Final validation of the tool with all the partners in WP8 |
| Output 2 | Written description of the main features of the web platform. Internal and external risks not yet identified |

Annex B.8

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| Activities in logical order | Prepare a draft report on the main features of the web platform (Guide) Final validation of the Guide with all participating partner in the Web platform concept |
| Output 3 | A vaccine confidence monitoring platform freely accessible is available. Internal and external risks not yet identified |
| Activities in logical order | Test the platform with all the partners in WP8 Validate the platform after feedback from the participating partners |
| Intended outcomes | Analysing public opinions on vaccines will help us understand the reasons behind the low vaccine coverage and come up with corresponding strategies to improve vaccine uptake. Detection in real time could give faster responses from public health authorities and others that will decrease the spread of false information |
| Unintended outcomes | Anti-vaccine movements could be against the use of vaccine sentiment detection tools and hinder their use. The information is not used for several reasons (not relevant, not updated, not attractive, not easy to find, etc). |



Co-funded by
the Health Programme
of the European Union

Work Package Activity Report

Give the work package number here

Period : dd/mm/yyyy – dd/mm/yyyy



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1. Description of the work done, for each task

Please complete the description of the work carried out and your partners' contributions per task assignment. Expand if sub-tasks are included.

- Task x.1: Give title here
 - Task leader:
 - Members of the working group:
 - Description of work
 - Partner's contributions

- Task x.2: Give title here
 - Sub-task x.2.1: *Give title here*
 - Task leader:
 - Members of the working group:
 - Description of work
 - Partner's contributions

 - Sub-task x.2.2: *Give title here*
 - Task leader:
 - Members of the working group:
 - Description of work
 - Partner's contributions



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2. Milestones and deliverables

Please describe any milestone or deliverable that has been reached during the period and attach any relevant document. Expand the tables if needed.

| Del No | Title | Description | Estimated Delivery Date | Status |
|--------|-------|-------------|-------------------------|--------|
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| Milestone No. | Title | Due date | Means of verification | Status |
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3. Deviations

Please describe any deviations from the initial workplan (e.g. delays)

Make sure any deviations from tasks are justified.

Questions for the process evaluation

The answers intend to be a base for a constructive process evaluation, i.e. to give feedback that could be useful to modify or fine-tune the work in WPs and between WPs. The intention is to do this survey regularly and the questions intend to be a compliment to more adapted questions to each WP.

Questions (1a-1f) are concerning the internal work (in WP and between WPs)

1a. Have you identified any internal constraining factors in your WP, between your WP and other WPs or factors not directly related to WPs but to JAV?

- Yes
- No
- To early to answer

1b. If you answered yes: what kind of internal constraining factors have you identified?

Open answer.....

1c. Which measures are you suggesting to mitigate or eliminate the constraining factors?

Open answer.....

1d. Have you identified any internal fostering factors that may mitigate or eliminate the constraining factors?

- Yes
- No
- To early to answer

1e. If you answered yes: what kind of internal fostering factors have you identified?

Open answer.....

1f. Is it possible to strengthen the identified fostering factors? If so, describe how.

Open answer.....

Questions 2a-5 are concerning external constraining or fostering factors or feedback

2a. Have you identified constraining factors in your work that you consider to be of a political nature?

- Yes
- No
- Not relevant or too early to answer

2b. If you answered yes, describe the constraining factors? How can these factors be mitigated or eliminated?

Open answer.....

2c. Have you identified fostering factors in your work that you consider to be of a political nature?

- Yes
- No
- Not relevant or too early to answer

2d. If you answered yes: Describe the fostering factors. How can these factors be retained or strengthened?

Open answer.....

2e. Have you received other feedback of political nature that you think is important to mention.

- Yes
- No
- Not relevant or too early to answer

2f. If you answered yes: Describe the type of feedback that you have received?

Open answer.....

3a. Have you identified constraining factors in your work that you consider to be of an economic nature?

- Yes
- No
- Not relevant or too early to answer

3b. If you answered yes, describe the constraining factors? How can these factors be mitigated or eliminated?

Open answer.....
.....

3c. Have you identified fostering factors in your work that you consider to be of an economic nature?

- Yes
- No
- Not relevant or too early to answer

3d. If you answered yes: Describe the fostering factors. How can these factors be retained or strengthened?

Open answer.....

3e. Have you received other feedback of political or economical nature that you think is important to mention.

- Yes
- No
- Not relevant or to early to answer

3f. If you answered yes: describe the type of feedback that you have received.

Open answer.....

4a. Have you received any feedback of technological, legal or social nature that you think is (or could be) important information in the process evaluation?

- Yes
- No
- Not relevant or to early to answer

4b. If you answered yes: describe the type of feedback that you have received and categorize it.

Open answer.....

5. Have you other observations or comments at this stage that you think are relevant in the process evaluation?

Open answer.....

Self-evaluation questionnaire for WP [nr]

The purpose of the self-evaluation questionnaire is to measure if the targets are possible to reach and, if not, find what has been done to reach the target or what measures that should be taken. The questionnaire will be circulated prior to the first and second meeting M12-M24 and is a part of the outcome evaluation.

WP [nr related to specific objective]

The target [nr] (a part of the specific objective [nr]) is formulated as following:

[The formulation of target as formulated in the logical framework]

Questions related to the target and indicators

1. Question related to the first indicator asking if you have fulfilled a part of the task, ie. Indicator 1

- Yes
- Partially
- No

1b. If not a yes, explain why and what kind of measures that were taken (or what kind of measures that should be taken)

.....

2. Question related to the second indicator asking if you have fulfilled a part of the task, ie. Indicator 2

- Yes
- Partially
- No

2b. If not a yes, explain why and what kind of measures that were taken (or what kind of measures that should be taken)

.....

[Question nr]. Is target [nr] possible to reach at M36 [or another specific delivery date] according to your assessment?

- Yes
- Partially
- No
- Do not know

[Question nr]. If not a yes, explain why and what kind of measures that have been taken or planned to be taken.

.....

[Question nr]. Have you registered any unintended outcomes (favourable or unfavourable)?

- Yes
- No

7b. If you answered yes, please describe the unintended favourable and/or unfavourable outcomes and give sources of verification.

Self-evaluation questionnaire for WP [nr]

The purpose of the self-evaluation questionnaire is to measure if the targets are reached and if not find what has been done to reach the target or what measures that should be taken. The questionnaire will be circulated prior to the final meeting M30- M35 and is a part of the outcome evaluation.

WP [nr related to specific objective]

The target [nr] (a part of the **specific objective [nr]**) is formulated as following:

[The formulation of target as formulated in the logical framework]

Questions related to the target and indicators

1. Question related to the first indicator asking if you have fulfilled a part of the task, ie. Indicator 1

- Yes
- Partially
- No

1b. If not a yes, explain why and what kind of measures that were taken (or what kind of measures that should be taken)

.....

2. Question related to the second indicator asking if you have fulfilled a part of the task, ie. Indicator 2

- Yes
- Partially
- No

2b. If not a yes, explain why and what kind of measures that were taken (or what kind of measures that should be taken)

.....

[Question nr]. Have you reached your target [nr] or do you expect to reach the target?

- Yes
- Partially
- No

[Question nr]. If not a yes, explain why and what kind of measures that have been taken or planned to be taken.

.....

[Question nr]. Have you registered any unintended outcomes (favourable or unfavourable)?

- Yes
- No

7b. If you answered yes, please describe the unintended favourable and/or unfavourable outcomes and give sources of verification.

.....

Annex F.



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Baseline assessment tool for EU-JAV project

<https://eu-jav.com/>

Partner no. 20 FOHM SWEDEN

Partner no. 15 NIPH ROMANIA

Baseline assessment tool for EU-JAV project

What is a baseline?

Baselines are data collected at the outset of a project (or an action) to establish the pre-project conditions against which future changes amongst a target population can be measured. Projects and programs establish a baseline as a comparison and planning base for monitoring and evaluations.

This baseline assessment tool should be used by the EU-JAV consortium. It will provide baseline information relevant to the EU-JAV objectives and the situation the project aims to address, and it is essential to the

In the first instance, partners may like to consider whether the project is relevant to them and record their conclusion in the yellow box below.

| |
|---|
| <p style="text-align: center;">Is the project relevant to the country/organisation? Go to the yellow cell and click on the button to the right (select either Yes, Partially or NO)</p> |
| |

The Data sheets contain the baseline indicators and the baseline questions. Please answer the BA-Questions as detailed as possible. The baseline indicators are mainly based on data sources from ECDC, Eurostat and ECHI and all data (2017 or nearby year) that we found have been registered. Statistics for the indicators are in some cases missing. No data means that data was missing in the table. If there is relevant statistics on national level, please enter these data in the cells and delete the text No data. The question marks (?) means that we have not found a reliable data source or in some cases that the data found is not reliable. Enter relevant information and remove the questionmarks. Provide information on which year the statistics apply. If there is no data or the data is unreliable, leave the text No data or the questionmarks in the cells. You could leave any further information on the statistics in the sheet named Comments.

When you have answered the questions and checked the statistics, please return this excel file to: camelia.claici@insp.gov.ro and to charlotta.nilsson@folkhalsomyndigheten.se

Annex F.

| INDICATORS | Country/Insitution |
|---|--------------------|
| 1. Vaccination coverage - Percentage of infants vaccinated against measles per country | |
| 2. Number of measles cases per country | |
| 3. Rate of measles cases per million population per country | |
| 4. Health care spending, total in country, euro per inhabitant | |
| 5. Health care spending on immunization programmes per country, per inhabitant | |
| 6. Health care spending in outpatient care, children 0-6 years per country. Euro per child | |
| 7. Public expenditure on primary education total per country per pupil (based on full-time equivalents) | |
| 8a. Vaccination for children (measles, rubella) voluntary (V) / mandatory (M) per country | |
| 8b. Vaccination (HPV for girls) voluntary (V) / mandatory (M) per country | |
| 8c. Vaccination (HPV for boys) voluntary (V) / mandatory (M) per country | |
| 8d. Vaccination for children (seasonal influenza) voluntary (V) / mandatory (M) per country | |
| 9a. Vaccination for children (measles, rubella), free of charge (F) / not free of charge (NF) | |
| 9b. Vaccination (HPV for girls), free of charge (F) / not free of charge (NF) | |
| 9c. Vaccination (HPV for boys), free of charge (F) / not free of charge (NF) | |
| 9d. Vaccination (influenza), free of charge (F) / not free of charge (NF) | |
| 10. At risk of poverty rate, percent of total population per country | |
| 11. Practising nurses per 100 000 inhabitants per country | |
| 12a. Vaccination attitudes i.e. confidence to measles containing vaccines ^A | |
| 12b. Vaccination attitudes i.e. confidence to seasonal influenza vaccines ^B | |

Data sources

Annex F.

BA: OPEN QUESTIONS* to EU-JAV partners

| Number of questions applicable to the partner's organisation | |
|---|---------------------|
| Number of answers | |
| Percentage of answers | |
| | |
| QUESTIONS | Country/Institution |
| 1. How is the National Vaccination Programme (NVP) organized in your country? | |
| Please PROVIDE A COPY of the programme in a table format (indicating age of vaccination and vaccine antigens administered at that time point) OR A LINK to the page where it can be accessed | |
| 2. Has the vaccination schedule been implemented throughout the country? | |
| Please DESCRIBE IN SOME DETAIL if the answer is NO | |
| 3. How are the observed or suspected vaccination adverse events registered and followed-up? | |
| Please DESCRIBE | |
| 4. During the last three years, what efforts have been made to reach children that have not been vaccinated against measles? | |
| Please LIST and DESCRIBE IN SOME DETAIL | |
| 5. During the last three years, have the efforts (described in 4) increased measles vaccination coverage in children that have been hard to reach? | |
| Please DESCRIBE | |
| 6. Do you anticipate that the EU-JAV deliverables will change the vaccination related knowledge, attitude and behaviour in your country, in the next three years? | |
| Please MOTIVATE IN SOME DETAIL | |

| | |
|---|--|
| 7. Do you anticipate that positive vaccination related changes will take place in your country, in the next 3 years, regardless of the EU-JAV deliverables? | |
| Please MOTIVATE IN SOME DETAIL | |
| 8. Do you anticipate that the materials/tools developed by the EU-JAV project will help to improve the vaccination coverage in your country? | |
| Please MOTIVATE IN SOME DETAIL | |
| 9. Do you anticipate that the EU-JAV deliverables will increase public confidence in vaccines and vaccination? | |
| Please MOTIVATE IN SOME DETAIL | |

***Open Questions**

the respondent can express his/hers own views and opinions rather than picking his/hers answer from a list of options

Annex F.

| COMMENTS | Country/Institution |
|---|---------------------|
| Comments to the BA-indicators or statistics | |
| Comments on the BA-questions or answers | |