



Work package 5 – Task 5.4

Report on feasibility study for a future coordinated cross-border vaccination campaign in EU and non-EU countries

(Deliverable D5.5)

Report prepared by

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This project has received co-funding from the European Union's Health Programme under Grant Agreement no. 801495

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Grant Agreement No.:	801495
Start Date:	01/08/2018
End Date:	31/03/2022
Project title	European Joint Action on Vaccination — EU-JAV
WP number	WP5
Deliverable number	D5.5
Responsible partner No.	20
Organisation	Public Health Agency of Sweden (Folkhälsomyndigheten)
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Nature Report	Report on cross border vaccination campaigns



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Abbreviations

Coalition for Life course Immunisation (CLCI)

European Observatory on health systems and policies (EU OBS)

EU Joint Action on Vaccination (EU-JAV)

European Centre for Disease Prevention and Control (ECDC)

European Commission (EC)

European Federation for Pharmaceuticals Industry (EFPIA)

EU funded projects:

- Improving IMMUnisation cooperation in the European UNION (IMMUNION)
- Jiu Jitsu with misinformation in the age of Covid (JITSUVAX)
- Reducing Inequalities in Vaccine uptake in the European Region - Engaging Underserved communities (RIVER EU)
- A clinical research network for the coordination and conduct of Covid-19 vaccine trials (VACCELERATE)
- Addressing vaccine hesitancy in Europe (VAXTRUST)

Public Health Agency of Sweden (PHAS)

Healthcare workers (HCWs)

Human papillomavirus (HPV)

Immunisation Information System (IIS)

International Association of Mutual Benefit Societies (AIM)

Key opinion leaders (KOLs)

Measles, mumps and rubella (MMR)

National immunisations programme (NIP)

Tailoring Immunization Programme (TIP)

Vaccine-preventable disease (VPD)

World Health Organization (WHO)

Work Package (WP)



Summary

A feasibility study for a future coordinated cross-border measles vaccination catch-up campaign is included in the EU Joint Action on Vaccination (EU-JAV) linked to work package (WP) 5 on cross-border analysis and visualisation of vaccine coverage data. Such a coordinated EU-wide measles vaccination catch-up campaign was envisaged to tackle immunity gaps in populations that have not been vaccinated against measles as part of the regular national childhood vaccination programmes (NIP).

Given limitations both in identifying unvaccinated/under vaccinated target populations for a coordinated cross-border vaccination campaign, a lack of comparable cross-border data on the reasons for low vaccination coverage (such as through vaccine acceptance studies), and the well-documented heterogeneous nature of vaccination programmes across the EU/EEA, ¹ the feasibility study was revised. Instead, the aim of this report is to provide a review of experience and best practice on what has already been done across borders and what can be gained by teaming up, as well as the facilitators and barriers. Even the scope of the feasibility study has been extended following a request by the European Commission to include all vaccines in the NIPs, as well as Covid vaccination. This report may therefore inform future coordinated cross-border vaccination campaigns.

Data was collected through a survey of countries done in partnership with EU-JAV WP8.1 on vaccine hesitancy, as well as 4 workshops with relevant public health officials in EU-JAV participating countries and the EU-JAV stakeholders who are representatives of the [EU Coalition for Vaccination](#). Of the 32 countries that were sent the survey, 28 responded.

Responses to survey questions revealed that only 9 out of 28 countries had worked previously across borders, and that countries in central and eastern Europe were more likely to report collaborative practices, whereas countries in northern Europe were more likely to report a lack of cross-border actions. The examples given of collaboration efforts included that respondents had participated in included research groups, a method for tailoring immunisation campaigns to specific low coverage populations or individuals, platforms for technical exchange, a neighbourhood collaboration on vaccine coverage and acceptance, and a Europe-wide annual vaccination campaign. However, a number of barriers to working across borders were also reported through the survey. Platforms for exchange of knowledge and practice were raised as a possible facilitator of enhanced cross border collaboration.

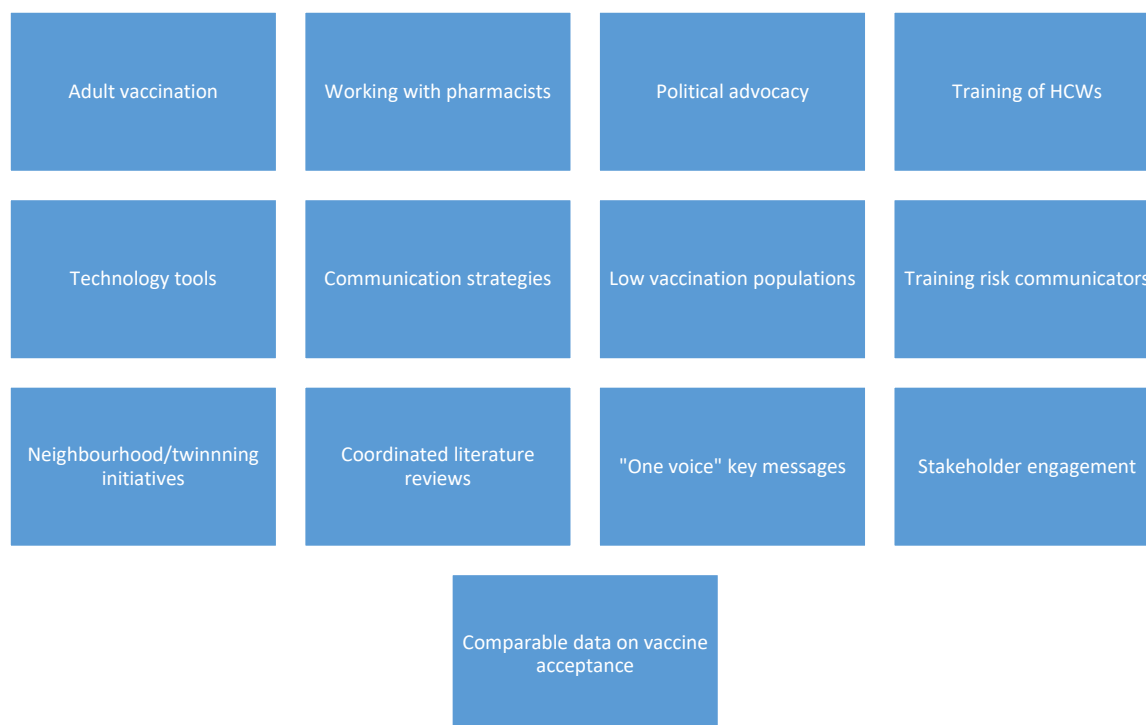
Through analysis of relevant statements from a workshop with regional breakout groups in October 2019, we identified 7 themes that participants raised as relevant for EU-wide and cross-border campaigns: adult vaccination, working with pharmacists, political advocacy, training of healthcare workers (HCWs), technology tools, communication strategies, and low vaccination populations. An additional 6 themes were added following 3 further digital workshops in November and December 2021, taking account of experience working with Covid vaccination and input from the EU-JAV stakeholders. These are: comparable data on vaccine acceptance, training risk communicators,



neighbourhood/twinning initiatives, coordinated literature reviews, “one voice” key messages and stakeholder engagement.

Overall, we have identified 13 themes from the data that may be relevant for EU and cross-border vaccination campaigns (see figure 1). These themes are presented in more detail together with examples of actions in the results section of this report.

Figure 1: figure showing 13 possible themes for EU wide and cross border campaigns



Introduction

Measles is a serious cross-border threat capable of affecting any country with immunity gaps. While significant immunity gaps due to suboptimal vaccination coverage remain, there is a high risk of widespread measles circulation. In its 2018 Rapid Risk Assessment, “Risk of measles transmission in the EU”, ECDC identified the main factors driving measles outbreaks in the region including: 1) the accumulation of populations susceptible to measles infection due to low current and historic vaccination coverage; and 2) the continued potential of importation and its role in the regional resurgence in particular among unvaccinated young children and adults. ²

The 2018 EU Council Recommendation on strengthened cooperation against vaccine preventable diseases provides the legal and technical framework for collaboration between Member States on actions to increase vaccination coverage. ³ In the context of the EU Council Recommendation, the findings of the EU Observatory report on “The organisation and delivery of vaccination services in the European Union”, 2018 ¹ and the EU-JAV baseline survey 2019 provide useful context on the similarities and differences in the NIPs, as well as perceived barriers and facilitators to vaccination, and what efforts have already been made at national level to increase coverage.

According to the EU Observatory report, there is a dedicated agency in each of the 27 EU countries in charge of developing and overseeing implementation of the NIPs; and, vaccination programmes are organized at the national level, with regional differences reported in 4 countries. The first dose of measles-containing vaccines is provided through primary care physicians or nurses. However, the timing of the second dose differs widely between countries, and different types of providers and professionals can be involved, such as school health services. Vaccination is administered by a variety of HCPs (including paediatricians, general practitioners (GPs), school physicians, and nurses), and settings (such as GP practices or school health services). There are also a variety of approaches regarding mandatory vaccination or other incentives; vaccination registries; and calculating vaccine coverage. In 26/27 EU countries, vaccination with measles-containing vaccines is free of charge at the point of delivery.

Facilitators for vaccination against measles included in the EU Observatory report are the inclusion of vaccination in publicly funded health services, awareness raising campaigns, good health service delivery network, public attitudes conducive to vaccination, the role of healthcare professionals, vaccine registries and effective monitoring systems, special incentive schemes including in some countries mandatory vaccination. Reported barriers to MMR vaccination include: vaccine hesitancy, a failure to reach vulnerable populations, lack of awareness of vaccination, insufficient training of healthcare workers, lack of vaccine registries, shortages of vaccines, and the voluntary character of vaccination in many countries.

As part of the EU-JAV baseline assessment, participating countries were asked to describe efforts to reach children that have not been vaccinated against measles during the last 3 years. Of the 20



countries that responded, healthcare workers' support and training was named by 6 countries, reminder/recall systems by 5 countries, media campaigns by 3 countries, information, education and communication materials for the public by 3 countries, as well as mandatory vaccination, vaccination of targeted populations, implementation of WHO's TIP methodology, and promotion of the World Immunisation Week were each mentioned by 2 countries, respectively.

A feasibility study for a future coordinated cross-border measles vaccination catch-up campaign in the EU is included in the EU Joint Action on Vaccination (EU-JAV), and is linked to work package (WP) 5 on cross-border analysis and visualisation of vaccine coverage data. Such a coordinated EU-wide measles vaccination catch-up campaign was envisaged to tackle immunity gaps in populations that have not been vaccinated against measles as part of the regular national childhood vaccination programmes (NIP). However, essential data to inform such a campaign is not currently available in formats that are comparable between countries. For example, sub-national data on measles vaccination is only available through the platform set up by EU-JAV WP5 from 3 EU/EEA countries, and comparable cross border data is lacking on the reasons for low vaccination coverage, such as from vaccine acceptance studies. Furthermore, ECDC's rapid risk assessment indicates a large heterogeneous population of young children and adults across Europe that are unvaccinated or not sufficiently vaccinated (i.e., 2 doses of measles, mumps and rubella [MMR] vaccines), but does not provide a segmentation of this large group.²

Given limitations both in identifying unvaccinated/under vaccinated target populations for a coordinated cross-border vaccination campaign, a lack of comparable cross-border data on the reasons for low vaccination coverage (such as through vaccine acceptance studies), and the well-documented heterogeneous nature of vaccination programmes across the region,¹ the scope of the feasibility study was revised. Instead, the aim of this report is to provide a review of experience and best practice on what has already been done across borders and what can be gained by teaming up, as well as the facilitators and barriers. Even the scope of the feasibility study has been extended following a request by the European Commission to include all vaccines in the NIPs, as well as Covid vaccination. We have interpreted "campaigns" in the broad sense of working in an organized and active way towards a particular goal, typically a political or social one. The term "cross-border" is defined as initiatives together with one or more other country, including but not exclusively neighbouring countries.

A literature review was considered but dismissed as there is not a strong tradition of writing up campaign work as peer-reviewed articles. Instead, we collected data on experience and best practice through interviews with key opinion leaders (KOLs) from ECDC and WHO Europe, 4 workshops with relevant public health officials and EU-JAV stakeholders and a survey of EU-JAV participating countries and EU-JAV stakeholders. After the first workshop at the EU-JAV General Assembly, Rome, in October 2019, the scope of the project was broadened to cover vaccination in general including all vaccines in the NIPs, not only measles vaccination.





Co-funded by
the Health Programme
of the European Union

The work under the EU-JAV including this project has been considerably impacted by the Covid pandemic, as the staff working on this project have been involved in the national pandemic response. In addition, we were asked by the European Commission in autumn 2021 to further broaden the scope of the feasibility study to include campaigns for vaccination against Covid. This was possible through the inclusion of a question specifically about the work with vaccination programmes against Covid in the digital workshops with national public health officials and EU-JAV stakeholders in November and December 2021.

This final report is aimed at all public health officials working at EU level and in the NIPs, as well as broader partners and stakeholders that are actively working on projects to enhance vaccination coverage. It includes a descriptive report of the methods and results, as well as tables and figures to illustrate the findings in easy to access formats.



*This project has received co-funding from the European Union's
Health Programme under Grant Agreement no. 801495*



*This project is coordinated by the French Health and Medical Research Institute with the support of the
French Ministry of Solidarity and Health*

Materials and Methods

A survey and 4 workshops were done in order to gather data on experience and best practice with regard to what has already been done across borders and what can be gained by teaming up, as well as the facilitators and barriers. The participants in the surveys included relevant public health officials in EU-JAV participating countries and the EU-JAV stakeholders who represent the EU vaccination coalition.

Before the data collection and to help the project group develop questions for the workshops and the survey, we embarked on a series of meetings in spring 2019 with KOLs from ECDC and WHO Europe in the field working at international level. These were:

- Patrick O'Connor, WHO Europe
- Robb Butler, WHO Europe
- ECDC VPD programme

Through these meetings, we understood that there were already ongoing cross-border vaccination campaigns led by WHO Europe and ECDC targeting both the whole population and sub-groups with lower vaccination coverage. These activities include a strong focus on tackling immunity gaps in measles vaccination but also broader vaccination programmes. Examples include the [European Immunisation Week](#), the WHO programme for Tailoring Immunisation Programmes ⁴ and the ECDC's Let's Talk About Protection. ⁵

These KOLs considered that it would be relevant for the EU-JAV project to focus on elaborating what can be gained by teaming up across borders, as well as a documentation of facilitators and barriers based on existing experience and best practice. Initiatives that are developed and implemented at national and/or regional level can be interesting as well as campaigns that are developed or supported at EU or international level.

Regional workshops at the EU-JAV General Assembly in Rome, October 2019

Through a workshop at the JAV General Assembly, Rome, in October 2019, we were able to gather perspectives from 30 participating national public health officials from EU-JAV countries, as well as ECDC representatives. The workshop included presentations on the technical background for EU-wide measles vaccination campaigns based on the EU Observatory report, the EU-JAV baseline assessment and the ECDC Rapid Risk Assessment on measles.

The second part of the workshop was a group exercise identifying possible themes for cross-border collaboration on vaccination campaigns amongst 3 parallel breakout groups of regionally similar or neighbouring countries, with a moderator/rapporteur from the Swedish Public Health Agency. The moderators/rapporteurs reported back headlines from each working group to all the participants and allowed time for a discussion and questions. By grouping participating countries in regional blocs and



then bringing the discussions back to the full group, we hoped to be able to uncover insights based on contextual similarities and pre-existing experience of working together. The regional blocs were broadly representative of geographical regions of Europe: northern, southern and central/eastern.

Subsequently, we analysed the written reports from the break out groups and workshop through coding relevant participant statements and then categorising these statements thematically.

Questions asked by the moderators to the participants in the break-out groups:

- What can be gained by teaming up?
- What could be done to leverage the facilitators?
- What could be done to meet the barriers?

The findings of the workshop are presented and discussed in the results section.

EU-JAV WP8 survey on vaccine hesitancy – cross-border questions

In collaboration with EU-JAV WP8.1 on vaccine hesitancy, we developed a series of questions to be added to their survey.⁶ The questions aimed at documenting cross-border collaborations linked to vaccine hesitancy and uptake issues, which we considered to be highly relevant to inform the report on data and experience of working across borders to address low vaccination coverage. Participants in the survey were asked a series of fixed responses and open-ended questions regarding their experience with cross-border work. The questions covered fields such as collaboration on study methodologies and sharing of data, and implementation of communication activities with cross-border partners.

The survey was distributed to NIPs covering 32 EU and associated countries in November 2019. Each country typically designated one individual to complete the entire survey, although some surveys were completed through collaborative efforts.

Questions added to the EU-JAV WP8.1 survey:

- Have any of these interventions to address barriers and drivers to vaccination been done as a collaboration with cross border partners? [Yes, No, I do not know]
- Have any of these studies to understand barriers and drivers to vaccination, including literature reviews or sharing of data, been done as a collaboration with cross border partners? [Yes, No, I do not know]
- Are there any examples of where you have collaborated with cross border partners on the development of vaccine information materials, including vaccine safety information and information to healthcare workers? [Yes, No, I do not know]



- Please describe any other collaboration (excluding the EU Joint Action on Vaccination) where you are working across borders on the development of plans or strategies relating to work on addressing barriers and drivers of vaccination.
 - In your experience, what could be the benefits of teaming up with cross border partners?
 - In your experience, what could be the difficulties of teaming up with cross border partners?
 - In your experience, what could be done to encourage more cross border collaboration?
[Free text]
- Has the knowledge from these studies been implemented in policies or actions and operations in your country/region?
- If you answered no to the previous question, please state why. If you answered yes, please elaborate. [Free text]
- What kind of experience does your organisation have from work related to maintaining or increasing good vaccine uptake and/or strengthening confidence? Has the work been: Conducted in cooperation 44 with other partners and stakeholders in your country or region? [1 = not at all, 2 = only to a limited extent, 3 = to some extent, 4 = to a great extent, 5 = I do not know]

The data from the cross-border questions was analysed by WP8 and presented as part of the WP8 Final Report on “Vaccine hesitancy and uptake: From research and practices to implementation”⁶, and summarized and discussed in the results section of this report.

Digital workshops with country representatives and EU stakeholders, November and December 2021

Relevant officials from national public health authorities of 10 EU-JAV participating countries, and a representative from ECDC, participated in 2 digital workshops in November and December 2021. The participating countries included both large and small EU/EEA countries, with a good geographic spread of countries from the various regions that are broadly described as northern, southern and central/eastern Europe. The countries participating were Denmark, Slovenia, Luxembourg, Romania, France, Sweden, Finland, Italy, Latvia and Malta.

An additional digital workshop was held with EU-JAV stakeholders in December 2021, where 8 stakeholder representatives participated. The stakeholder groups represented were: Vaccines Europe, EFPIA, Vaccines Today, CLCI, EuroHealthNet (2), AIM and Vulgamed.

Questions:

- Additional reflections on what can be gained by teaming up?



- What has been done across borders with regard to the work on vaccination programmes against Covid-19?
- What type of EU support is needed to facilitate more cross border actions?

The findings of the workshops are presented and discussed in the results section.



Results

Regional workshops at the EU-JAV General Assembly in Rome, October 2019

More than 30 representatives from national public health authorities representing 19 EU-JAV participating countries and ECDC participated in regional workshops at the EU-JAV General Assembly, Rome.

Broader stakeholder collaboration, such as including pharmacies and finding synergies with broader public health initiatives, was raised as an opportunity by countries in the southern region breakout group which included participation of representatives from France, Belgium, Greece, Italy, Malta and Spain. The group also identified a need for high level political engagement and collaboration across ministries, for example to secure financing for measles catch-up campaigns amongst adults. Training of healthcare workers in vaccinology and in communication skills linked to vaccine safety and adverse events was also raised. The development of technology-based tools in different languages, for example to send out invitations to vaccinate and reminder systems, was also suggested for relevant target groups.

Some similar issues were discussed by the northern region breakout group which included the participation of representatives from Norway, Germany, Austria, Lithuania, Latvia, Finland and Denmark. In addition, this group raised border crossings as a key opportunity for working across borders, for example in ferry terminals and airports, as well as connected to international mass gatherings. Additionally, the sharing of patient stories was seen as an important cross-border strategy for supporting vaccination campaigns. Reaching mothers with positive messages on vaccination through social media platforms and addressing lower vaccination rates amongst migrant groups were raised as common target groups where working across borders can create synergies and provide inspiration.

Concerns over the unknown vaccination status of migrant workers and their families were raised by participants in the Central and eastern region breakout group including participation of representatives from Romania, Serbia, Slovenia, Croatia and Malta. There was also a discussion about healthcare workers who may be anti-vaccination or lack training on communication skills. In this group, strategies to target children were discussed, such as checking vaccination status when children are admitted to school and explaining the risks of not vaccinating to parents.

Relevant statements are documented in the table below, by regional breakout group (Table 1).

Table 1: table with breakdown of relevant statements by regional breakout group during the regional workshops at the EU-JAV General Assembly in Rome, October 2019



Southern – France, Belgium, Greece, Italy, Malta, Spain	Northern – Norway, Germany, Austria, Lithuania, Latvia, Finland, Denmark, Sweden	Central and Eastern - Romania, Serbia, Slovenia, Croatia, Malta
Working with pharmacies to reach unvaccinated adults.	Campaigns at border crossings - ferry terminals across the Baltic, as well as in airports.	Unknown vaccination status of foreign workers and families.
Synergies with broader public health initiatives – such as infection control, hand hygiene, antibiotic use, or general public health initiatives.	Sharing patient stories such as HPV/cervical cancer patient story from Ireland, Laura Brennan.	HCWs not sufficiently aware of need to check vaccination status of adults.
High level political commitment and collaboration across ministries.	Reach social media users, such as mothers who are on Facebook, with messages on the benefits of vaccine.	Groups of HCW and students that are anti- vaccination.
More vaccinology and communication skills in curricula for HCWs.	Reminder systems for parents if children are not vaccinated.	Take account of regional differences within countries.
Development of technology-based tools in different languages, such as mobile apps and personalized information.	Information campaigns at mass international gatherings.	Explaining the risks of not vaccinating children.



Provide financing of youth/adult measles vaccination campaigns.	Low vaccination amongst migrant workers and migrant groups/diaspora.	Training to improve communication skills amongst HCWs.
	Anti-vaccine discourse/disinformation on social media.	Check vaccination status of children before they start school.
	Specific strategies to reach low vaccination groups.	
	Work with media to communicate benefits of vaccination.	
	Concerns over unvaccinated HCWs.	

As there were not any strong similarities in the statements by region, we grouped all the statements together for further analysis by themes. From the analysis, 7 themes were identified: working with pharmacists, political advocacy, training of healthcare workers, technology tools, catch-up vaccination for adults, communication strategies and low vaccination populations. The table below illustrates the categorization of statements from the regional workshops by theme (Table 2).

Table 2: table with categorization of participant statements by theme, Regional workshops at the EU-JAV General Assembly in Rome, October 2019

Themes	Statements
Working with pharmacists	<ul style="list-style-type: none"> Working with pharmacies to reach unvaccinated adults.
Political advocacy	<ul style="list-style-type: none"> Synergies with broader public health initiatives – such as infection control, hand hygiene, antibiotic use, or general public health initiatives. High level political commitment and collaboration across ministries. Campaigns at border crossings - ferry terminals across the Baltic, as well as in airports.
Training healthcare workers	<ul style="list-style-type: none"> HCWs not sufficiently aware of need to check vaccination status of adults. More vaccinology and communication skills in curricula for HCWs. Groups of HCW and students that are anti-vaccination. Training to improve communication skills amongst HCWs. Concerns over unvaccinated HCWs.



Technology tools	<ul style="list-style-type: none"> • Development of technology-based tools in different languages, such as mobile apps and personalized information.
Catch up vaccination for adults	<ul style="list-style-type: none"> • Provide financing of youth/adult measles vaccination campaigns.
Communication strategies	<ul style="list-style-type: none"> • Sharing patient stories such as HPV/cervical cancer patient story from Ireland, Laura Brennan. • Reach social media users, such as mothers who are on Facebook, with messages on the benefits of vaccines. • Explaining the risks of not vaccinating children. • Anti-vaccine discourse/disinformation on social media. • Work with media to communicate benefits of vaccination. • Reach social media users, such as mothers who are on Facebook, with messages on the benefits of vaccine.
Low vaccination populations	<ul style="list-style-type: none"> • Specific strategies to reach low vaccination groups. • Low vaccination amongst migrant workers and migrant groups/diaspora. • Take account of regional differences within countries. • Unknown vaccination status of foreign workers and families. • Check vaccination status of children when they start school.

EU-JAV work package 8 survey on vaccine hesitancy – cross-border questions

The results of the cross-border questions included in the WP8 survey on vaccine hesitancy provide a useful reference on existing EU wide and cross border collaboration on these topics. The WP8 Final Report, *Vaccine hesitancy and uptake: From research and practices to implementation*, can be important for planning of EU wide vaccination campaigns. ⁶

In summary, the overall response rate was 88%, with answers from 28 EU and associated countries collected by June 2020. As illustrated in the maps in the figure below, of the 28 countries participating in the survey, 9 responded “yes” to the questions on whether they had conducted studies or interventions to understand barriers and drivers of vaccination with cross-border partners, including literature reviews and sharing of data (Figures 2 and 3). With regard to collaboration on studies, 17 countries responded “no” and 2 countries responded “I do not know”, whereas with regard to collaboration on interventions, 16 countries responded “no” and 3 countries responded “I don’t know”.



Figure 2: Map showing response to question: Have any studies to barriers and drivers of vaccination, including literature reviews or sharing of data, been done as a collaboration with cross border partners?

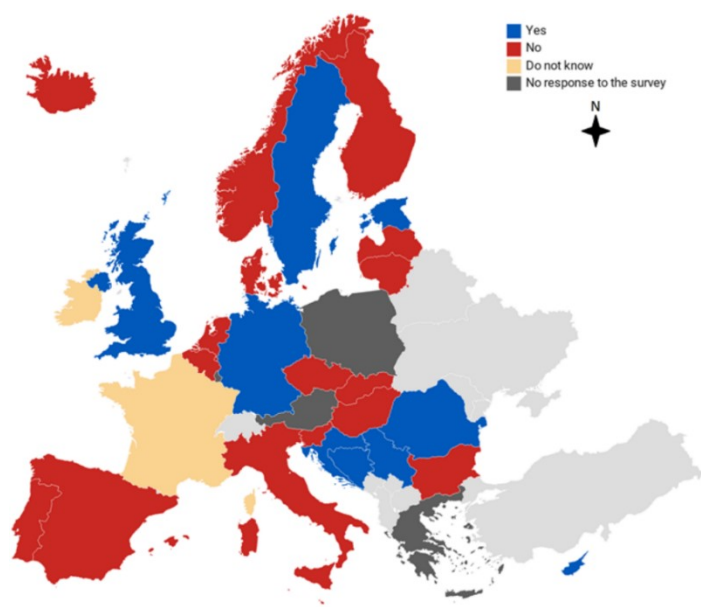
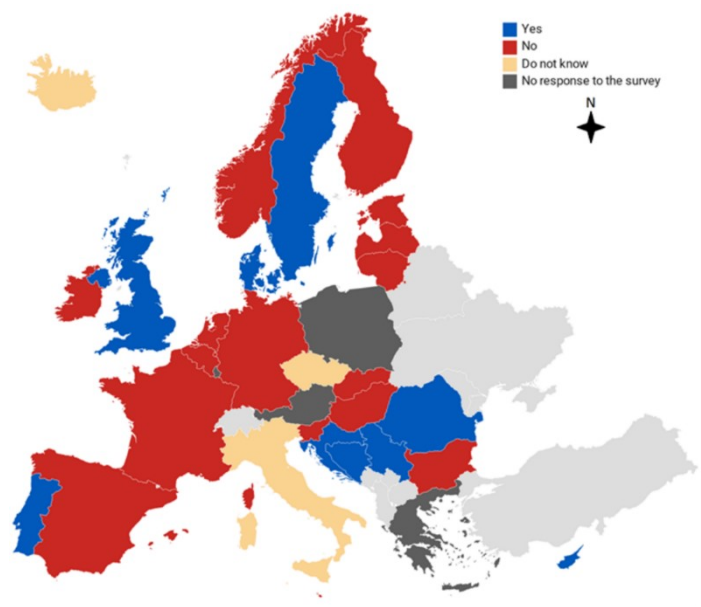


Figure 3: Map showing responses to question: Have any interventions to address barriers and drivers to vaccination been done as a collaboration with cross border partners?



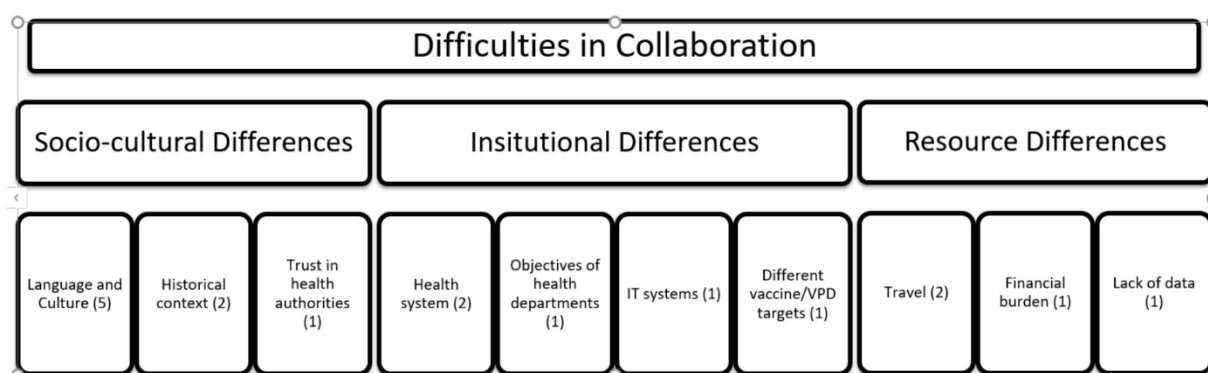
Only 6 countries responded “yes” when asked whether they had collaborated with cross-border partners on the development of vaccine information materials, including vaccine safety information and information to HCWs, with 19 countries responding “no” and 3 responding “I don’t know” to the same question.

Analysis by WP8 of the collated results of these questions reveal three overall trends:

- 1) the majority of countries responded to the questions either claiming that there have been no collaborative efforts or that they were unaware of such efforts;
- 2) countries were likely to respond to these questions in the same manner. That is, if a country reported no collaborative actions with one question, they were also likely to report no collaborative actions on the other questions; and
- 3) on a regional level, countries in central and eastern Europe were more likely to report having conducted collaborative practices, whereas countries in northern Europe were more likely to report a lack of collaboration efforts.

The main benefits of cross-border collaboration, as well the opportunities and barriers, and possible incentives are discussed in the report through the analysis of the open-ended questions. Reported benefits include the sharing of experiences of studying vaccine hesitancy and best practices between countries. Specific examples include the sharing of data and collaboration in reviewing the scientific literature. The barriers of working cross-border reported through the survey were rather extensive, including socio-cultural barriers such as language and historical context, institutional barriers such as health system and resource burden barriers such as lack of personnel and budget (figure 4).

Figure 4: Illustration of responses to open-ended question on difficulties in collaboration



The examples given of collaboration efforts that respondents had participated in included research groups, a method for tailoring immunisation campaign to specific low coverage populations or individuals, platforms for technical exchange, a neighbourhood collaboration on vaccine coverage and acceptance, and a Europe-wide annual vaccination campaign (Table 3). Responses on incentives or

encouragements for promoting more cross-border actions included platforms for exchange, such as workshops and teleconferences.

Table 3: Table of examples of collaborative efforts and platforms

Examples of collaborative efforts and platforms for exchange
Nordic group on vaccine coverage and acceptance
WHO Tailoring Immunisation Programme (TIP)
ECDC NITAG and Technical Advisory Group on Vaccine Hesitancy
WHO technical advisory group
Venice I-III
European Immunisation Week

Countries provided wide ranging examples of how knowledge from cross-border studies and actions have been implemented. Examples given included improving communication by healthcare workers, measuring vaccine acceptance, developing vaccine reminder systems, informing seminars and high level advocacy for financial commitments (Table 4).

Table 4: Table showing implementation of knowledge from cross-border studies and collaboration

Implementation of knowledge from cross border studies and collaboration
Improve communication between HCWs and patients
Measurements for vaccine acceptance
Conferences, seminars
Trainings of vaccine programme administrators
Vaccine reminder systems
High-level advocacy for political and financial commitments
Vaccine decision tool
Vaccine registration system

Digital workshops with country representatives and EU stakeholders, November and December 2021

The participating officials from national public health agencies and EU-JAV stakeholders unanimously agreed that the 7 common themes for cross-border campaigns identified from the workshop with regional break out groups, October 2019 and the results of the WP8 survey were still valid in terms of what can be gained by teaming up, as well as with regard to facilitators and barriers.

In addition, that there had been significant developments through the Covid pandemic in terms of EU-wide collaboration on purchasing of Covid vaccines. Regular and intensive EU level exchanges on Covid



vaccination at a technical level using the EU Health Security Committee and the ECDC NITAG platform were reported. Participants commented that the WHO Community of Practice shares tools, data and experience on behavioural and cultural insights relating to the pandemic including vaccine acceptance and risk communication.

In addition, countries reflected on the high value of locally established platforms for regular knowledge sharing and exchange with neighbouring countries. There have been regular ad hoc meetings of vaccination programme leads in the Nordics throughout since the start of the Covid vaccination programmes to discuss current status, next steps and how the countries can help each other. Another example given was the Nordic collaboration on vaccine coverage and acceptance, which is a formal group that has a terms of reference agreed by the participating public health authorities and a rotating chairmanship. Specific case studies of country experiences, such as the Danish experience with a sudden drop of HPV vaccination coverage and subsequent social media campaign, were highlighted as valuable cross-border tools for exchange of experience and best practice. There is also a regular collaboration between the Baltic countries on vaccination uptake and communication.

Some participants raised collaborations in their neighbourhoods that are supported by the EU and have been developed during the Covid pandemic. This includes a collaboration in the Baltics relating to vaccine supply, and a collaboration between Romania, Hungary, Germany and Austria on reaching low vaccination groups. Smaller countries in particular have asked for support from neighbours in various vaccination related projects, including vaccine supply.

Stakeholder participants referred to a number of relevant EU funded projects under Horizon 2020 and the 3rd EU Health Programme in which they participate and which can provide valuable insights, as well as provide opportunities to take forward learnings and collaborations from the EU-JAV. Examples given included:

- Improving IMMunisation cooperation in the European UNION (IMMUNION)
- Jiu Jitsu with Misinformation in the Age of Covid (JITSUVAX)
- Reducing Inequalities in Vaccine uptake in the European Region - Engaging Underserved communities (RIVER EU)
- A clinical research network for the coordination and conduct of Covid-19 vaccine trials (VACCELERATE)
- Addressing vaccine hesitancy in Europe (VAXTRUST)

A reflection from the work in these projects is their value in concretely sharing experiences across borders from working with specific communities to enhance the collective impact and reach of project activities. For example, there are a number of EU countries that host diaspora that have migrated from other EU countries. Sometimes there may be access or hesitancy issues that are specific to these groups which are common across borders. Another consideration are the common learning needs of HCWs across borders, who may be able to benefit from the training curricula currently under development. Yet another is understanding drivers of vaccine hesitancy across borders and identifying



potential common mitigation strategies, which could in turn be adapted across borders to national contexts. One country mentioned participation in IMMUNION since April 2021, an EU funded project under the 3rd EU Health Programme with focus on improving immunisation cooperation in the EU, including communication.

Ongoing EU-funded immunisation projects have held a series of multilateral meetings, with the outcome to develop common working groups on the following themes: communication and engagement; training; policy; dissemination of research; and project management and leadership. These working groups complement the identified possible themes for EU wide and cross border campaigns.

EU-JAV stakeholders pointed out the urgent need for the EU to support better coordination of existing initiatives in order to identify and facilitate synergies, as well as avoid duplication. The sustainability of ongoing initiatives and platforms, including the EU-JAV project is a concern and a hope was expressed for an “EU-JAV +” to continue the work. EU-JAV stakeholders noted that it is fundamental for the EU to foster additional intra-agency collaboration between EU Institutions to avoid duplicative calls for proposals and tenders, as well as to ensure that forthcoming calls for proposals and tenders take into account and build on existing research findings and project outputs.

In addition, platforms for collaboration often include political and technical representatives from countries, but not the broader stakeholders that operate closer to target audiences and can support actions to increase vaccination coverage and acceptance. EU-JAV stakeholders suggested to develop existing and new platforms that give broader stakeholders the opportunity to be engaged in discussions and planning strategies.

EU-JAV stakeholders have been activated by the EU Commission in the dissemination of various EU communication materials about Covid vaccination, for example interviews with experts. A coordinated action by the vaccine industry (#wewontrest) to raise awareness of the intense work involved in the development of the Covid vaccines was discussed as an example of an EU-wide vaccination campaign. EU-JAV stakeholders pointed out the value that a “one voice” approach can bring to avoid confusion amongst the public.

Other countries pointed out the barriers to working across borders, stating that they had no experience of cross-border vaccination campaigns even with their closest neighbours. Furthermore, that varying levels of vaccination coverage mean that campaigns need to be designed differently. There are even examples of where Covid vaccination campaigns have targeted nationals residing in a neighbouring country, but where no collaboration has taken place.

Participants stated that they appreciated in particular the opportunity of the digital workshop to share their experiences of working with the Covid pandemic, including experiences working on Covid vaccination campaigns. More of this type of exchange and support in small groups would be welcomed.



The participating countries raised a number of ongoing initiatives relating to EU support, as well as suggestions for how this support could be developed and intensified, or for new initiatives. Supporting platforms for exchange of information and best practice was given as an example of where gains could be made through additional EU support to facilitate more cross border actions on vaccination. Technical exchanges on vaccinology and vaccine recommendations are already supported by the EU system but could be further enhanced, such as the ECDC NITAG and neighbourhood collaborations supported by the EU Commission for sharing of vaccines. There is more scope for EU support for actions to increase vaccination coverage and acceptance, as well as support for training of risk communicators on vaccine safety and adverse events, and common key messages based on the latest science.

Key statements by participants in the digital workshops have been captured and categorised by theme in the table below (Table 5).



Table 5: Table with participant statements by theme, digital workshops with country representatives and EU stakeholders, November and December 2021

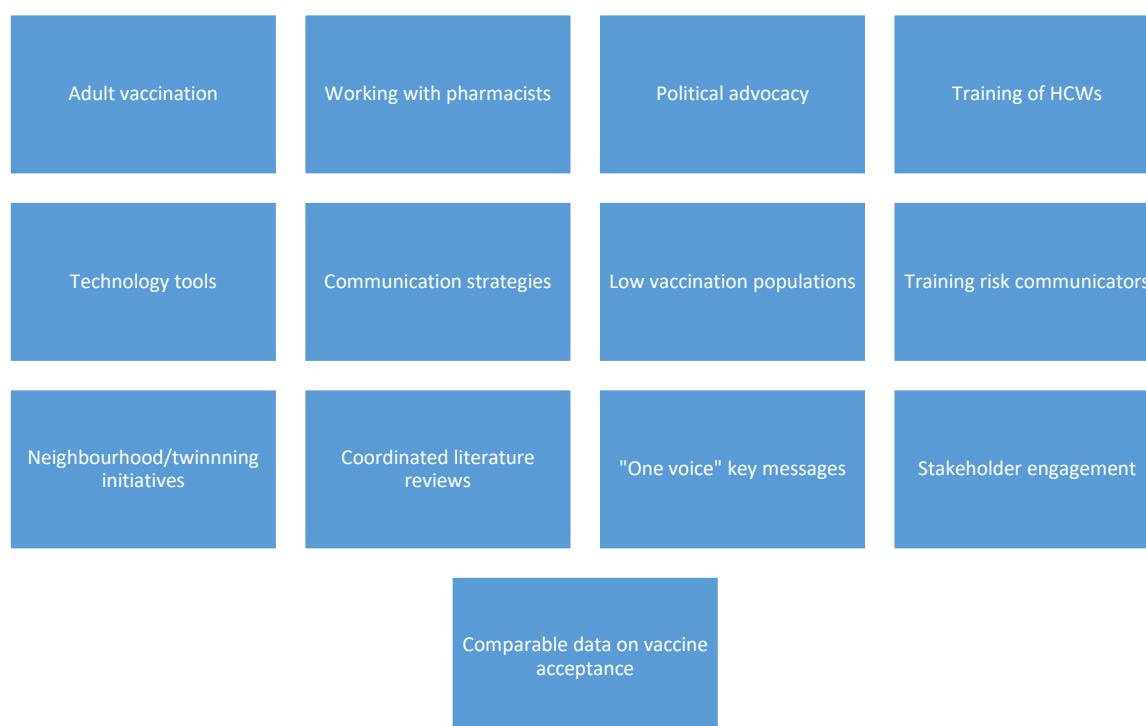
Themes	Statements
Comparable data on vaccine acceptance	<ul style="list-style-type: none"> • Sharing of tools and experience on behavioural and cultural insights relating to the pandemic and vaccine acceptance. • Developing formats for comparing data and identifying trends cross-border.
Training risk communicators	<ul style="list-style-type: none"> • Media training for risk communicators on vaccine safety and adverse events.
Neighborhood/twinning initiatives	<ul style="list-style-type: none"> • Platforms for exchange and support in small groups. • High value of EU-wide and locally established platforms for regular knowledge sharing and exchange with neighbouring countries. • Access or hesitancy issues that are common to diaspora living in several EU/EEA countries.
Coordinated literature reviews	<ul style="list-style-type: none"> • Common reviews of the latest science to support development of key messages. • Examples of good practice on how to support HCWs and increase coverage in low population groups. • Identify new practices for “real time” social media monitoring of questions and disinformation.
“One voice” key messages	<ul style="list-style-type: none"> • “One voice” approach can bring to avoid confusion amongst the public. • Take inspiration from coordinated action by the vaccine industry (#wewontrest).
Stakeholder engagement	<ul style="list-style-type: none"> • Develop and provide resources for existing and new platforms that include broader stakeholders that are closer to target groups. • Engagement of broader stakeholders to respond to questions and disinformation, for example in social media. • Collaboration with professional and medical student associations. • Work with patient groups to develop patient stories that can engage media and the public.



Discussion

Overall, we have identified 13 broad themes where value can be gained and resources saved from teaming up across borders. These themes are listed in the figure below and can be used as an operational hook for all public health officials working at EU level and in the NIPs, as well as broader partners and stakeholders that are actively working on projects to enhance vaccination coverage (Figure 1). These themes are presented in more detail together with examples of actions in the results section of this report (Tables 2 and 5).

Figure 1: figure showing 13 possible themes for EU wide and cross border campaigns



This report seeks to identify experience and best practice, as well as the benefits and facilitators of working at EU level and cross border on vaccination campaigns. The data and analysis can be used in the planning of EU wide and cross border vaccination campaigns, although there are limitations in what can be achieved without comparable cross border data on vaccine acceptance, and given the heterogeneous and context specific nature of national vaccination programmes. Proposals for EU wide and cross border vaccination campaigns must always take account of the local context in order to avoid campaigns becoming more burdensome than beneficial.



Analysis by EU-JAV WP8 of the results of the cross-border questions in the survey on vaccine hesitancy and uptake revealed that only 9 out of 28 countries reported having collaborated across borders, and that countries in southern and eastern Europe were more likely to report having conducted collaborative practices, whereas countries in northern Europe were more likely to report a lack of collaboration efforts. The barriers include socio-cultural barriers such as language and historical context, institutional barriers such as health system and IT, and resource burden barriers such as lack of personnel and budget. These findings were reported either by an individual representative or group of representatives from the NIPs.

The Covid pandemic has accelerated the implementation of vaccination registries at national level, including a reminder system function in all EU countries which allows the public health authorities to remind the population about vaccination times or missed vaccinations. These registries can help to estimate vaccine coverage nationally and sub-nationally, as well as identify low coverage groups and areas. The data can also be used to compare the situation cross border and identify common trends between countries, which could form the basis for future collaboration.

Through the Covid pandemic, we have also seen the high value of common platforms for early sharing and exchange on rapidly developing vaccination issues. For example, the ECDC NITAG platform regularly shares information on science, evidence, approaches and practices relating to vaccination against Covid. Furthermore, the WHO Community of Practice shares data, tools and experience relating to behavioural and cultural insights including Covid vaccination acceptance and risk communication. In addition, the Covid pandemic has taught us that teaming up can be helpful and even avoid confusion amongst media and the public. In particular, a minimum level of coordination on key messages relating to vaccine safety and adverse events would be helpful, even if the recommendations and implementation of vaccination programmes varies locally.

There is some evidence of locally initiated platforms for collaboration between neighbouring countries, and these platforms may be relevant for EU wide and cross-border vaccination campaigns. More EU support of platforms for collaboration is a possible area for further development, in particular to encourage collaboration on issues such as vaccine coverage, acceptance and risk communication, and between small resource poor countries that are contextually similar but geographically remote.

Pharmacists are identified as an underused partner for reaching adults who may have missed vaccination as part of the regular national vaccination programmes, for example if they have migrated from another country with different recommendations or lower vaccination coverage. Political level stakeholders are also identified as critical to maintaining the budgets needed to finance cross border collaboration, as well as being important for broader public health synergies and collaboration across different ministries within countries.

We see particular advantages in teaming up between countries hosting common low vaccination populations or diaspora, and initiatives targeting HCWs and medical students. As well as sharing



experience and resources, this will also help to avoid duplication in the plethora of initiatives targeting these groups.

How to integrate operational experience from a series of highly relevant EU funded projects under Horizon 2020, that have blossomed during the pandemic, into the plans and strategies for vaccination campaigns is a justified concern for the EU-JAV stakeholders. This could for example be achieved through the regular reporting by these projects to EU-wide platforms for collaboration, such as EU HSC, ECDC NITAG and the WHO BCI Community of Practice, as well as more systematic dissemination and exploitation of project outcomes and better inter-agency coordination.



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