

Service contract to identify obstacles to vaccination of physical, practical or administrative nature and develop recommendations

Deliverable 9 (D9)

HADEA/2021/OP/0010

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1. Introduction

The objective of Task 3 was to collect and evaluate national, regional, and local vaccination practices submitted by Member States' health authorities on the Best Practice Portal¹ of the European Commission's Directorate-General for Health and Food Safety (DG SANTE) to identify five best or promising practices. This report presents the methodological approach taken, the evaluation results, and the five selected practices.

To collect practices, a call was launched on the Best Practice Portal in collaboration with European Health and Digital Executive Agency (HaDEA) and DG SANTE and remained open to Member State health authorities from 29 September until 27 November 2022, including an extension of two weeks to allow health authorities to refine their submissions and encourage additional health authorities to submit a practice. The consortium closely collaborated with health authorities before and during this period to inform them of the project and its scope, guide them through the submission process, provide answers to their questions, and highlight timelines and deadlines.

The requirement of deliverable 9 (D9), as per Tender Specifications, was to collect "at least five best practices to overcome obstacles to vaccination of physical, practical and administrative nature, from at least two different EU Member States". A revised set of evaluation criteria was agreed by the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases (SGPP) during a long revision process aiming to make the criteria more inclusive. As a result, 'promising practices' were also included alongside 'best practices' in the revised criteria.

According to the SGPP, "a best practice is a relevant policy or intervention implemented in a real life setting and which has been favourable [*sic*] assessed in terms of adequacy (ethics and evidence) and equity as well as effectiveness and efficiency related to process and outcomes. Other criteria are important for a successful transferability of the practice such as a clear definition of the context, sustainability, intersectorality and participation of stakeholders."² Promising practices follow the same evaluation criteria as best practices, however for some of the sub-criteria the requirements are less strict for promising practices, specifically by:

- ◆ Requiring less detail than the best practice criteria. For instance, a best practice criterion was '*An evaluation plan was designed including elements of effectiveness and/or efficiency and equity*', while the corresponding promising practice criterion was '*The practice presents ideas on how it can be evaluated in the future*'.
- ◆ Eliminating some evaluation criteria. For instance, a best practice criterion was '*The practice has been evaluated with a sufficient level of independency and takes into account social and economic aspects from both the target population and the perspectives of relevant other stakeholders concerned (e.g. formal or informal caregivers, health professionals, teachers, health authorities)*' while the promising practice criterion was '*Not yet required / can be left empty*'.
- ◆ Requiring less points in the quantitative scoring to pass the evaluation thresholds, as further elaborated in Chapter 3.5 on scoring thresholds.

¹ <https://webgate.ec.europa.eu/dyna/bp-portal/>

² European Commission, Directorate-General for Health and Food Safety (n.d.), *Criteria to select best practices in health promotion and disease prevention and management in Europe*, available at: https://health.ec.europa.eu/system/files/2021-01/sgpp_bestpracticescriteria_en_0.pdf



The rationale behind including promising practice criteria was to ensure that practices, which are relevant and purposeful to overcome vaccination obstacles but are not as fully developed as best practices, could be included in the selection. For instance, during the COVID-19 pandemic, Member States designed and implemented some relevant, effective COVID-19 vaccination practices; however, because these practices are relatively recent, evaluations of these practices may not have been initiated yet by the practice owners. Since the best practice criteria require an evaluation of the practice, these COVID-19 practices would not have been included in the selection if it was not for the introduction of the promising practice criteria. For this project, it was regarded important to give promising practices the opportunity to be considered for the final selection, as they offer useful measures and lessons learnt that other Member States can benefit from. To this extent, the evaluation also examined closely whether the practices could be deemed fit for mutual learning (Task 4) and piloting (Task 5).

Finally, the five selected practices are promising practices from five different Member States; hence, the requirement for D9 was achieved.

2. Overview of received practices

Overall, a total of 24 practices were submitted by 16 regional or national health authorities via the Best Practice Portal³. Submissions came from Northern, Southern, Eastern, and Western Europe. France, Spain, and Portugal submitted three practices each, followed by two practices each from Croatia and Ireland. The majority of participating Member States submitted one practice.

Four main target groups were identified in the submitted practices: elderly, adolescents, children, and all age groups. The most mentioned target groups are 'all age groups' and 'children'. Some received practices covered multiple target groups. Further, some practices covered 'all age groups' but also focussed on a certain target group; in these cases, both 'all age groups' and the relevant specific target group were assigned to the practices to highlight this focus. The result of this analysis is presented in Figure 1 below.

Figure 1. Target groups addressed by submitted practices

Target groups addressed by submitted practices

■ children ■ adolescents ■ elderly ■ all age groups

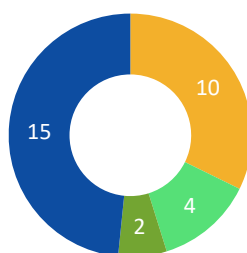


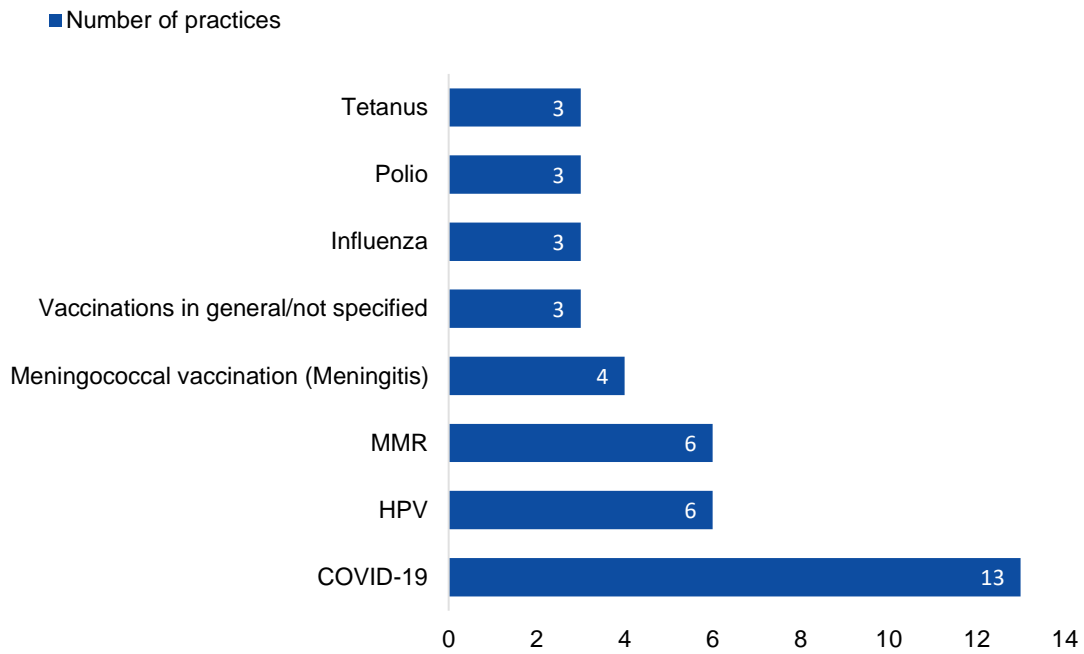
Figure 2 demonstrates the coverage of vaccines by the practices. It shows the number of times each vaccination under the scope of the project is covered by all received practices. Some practices focus on multiple vaccinations, which is why the numbers in the figure below exceed the total number of practices. The vaccination most covered by the practices is for COVID-19, presumably because the COVID-19 pandemic is very recent, and all Member States were affected by it. Other vaccinations that

³ <https://webgate.ec.europa.eu/dyna/bp-portal/>

are well covered by the practices are the Human papillomavirus (HPV) and Measles, Mumps, and Rubella (MMR) vaccines.

Figure 2. Vaccinations covered by the submitted practices

Vaccinations covered by the submitted practices



3. Methodological approach

3.1. Overview of the methodological approach

Figure 3 presents the methodological steps which were taken to carry out the evaluation and includes a timeline for each step.

Figure 3. Methodological steps of evaluation



3.2. Evaluation team

The evaluation team consisted of eleven experts: eight evaluators from Fisabio, ifok, the European Association of Paediatricians (EAP), and Kantar Public who also assumed the role of the three rapporteurs. The eight evaluators covered essential areas of expertise for this evaluation, namely public health, paediatrics, capacity building and mutual learning, as well as policy and evaluation expertise. The three rapporteurs are specialists in policy and evaluation at the European level and ensured that the results of the evaluation were in line with the expectations of HaDEA, DG SANTE, and the European Centre for Disease Prevention and Control (ECDC).

The role of the evaluators was to review all received practices based on the revised evaluation criteria provided by DG SANTE. After evaluators had reviewed the practices, the role of the rapporteurs was to revise the evaluations for quality, coherence, completeness, and accuracy. This distribution of roles followed the one employed for DG SANTE's best practice evaluations on the Best Practice Portal.

3.3. Implementation of the evaluation

Due to longer-term ongoing technical updates on the Best Practice Portal, it was not possible to conduct the evaluation on the Portal in a timely manner. As a result, HaDEA and Kantar Public agreed on 8 December 2023 to carry out the evaluation outside the Best Practice Portal. For this, Kantar Public prepared Excel evaluation forms which integrated the revised evaluation criteria, which include best practice and promising practice criteria as agreed by the SGPP. The evaluation encompassed exclusion, core, and qualifier criteria, each covered by a set of sub-criteria.

Based on the information provided in the practice submissions, the evaluators then assessed the practices using either the best or promising practice criteria to evaluate the practices assigned to them. The evaluation comprised a quantitative scoring and a qualitative assessment:

- ◆ The quantitative scoring for all evaluation criteria was the average score that was given by the two to three evaluators assigned to each practice.
- ◆ Evaluators also gave individual qualitative assessments on all sub-criteria and the practice overall. The qualitative assessments of the sub-criteria highlighted key points, missing or unclear information, and justifications for the scoring. The assessment of the practice overall focused on main conclusions and recommendations about whether the practice should be taken forward for an onsite visit (Task 4) and the piloting (Task 5), taking into consideration innovative, creative or unique elements of the practice that can be transferred to other settings. This overall qualitative assessment ensured that the selected practices would be meaningful and engaging for health authorities to secure their buy-in for the following stages of the project.

After the evaluators had completed their assessment, the entire evaluation team (including the rapporteurs) determined in a final meeting on 12 January 2023 the practices which were the most interesting to take forward. For these interesting candidates, further information was collected via interviews and email exchanges with the relevant health authorities in January 2023 to complement and/or clarify information. Afterward, the rapporteurs reviewed all practices based on the information collected, the practices submitted, and the qualitative and quantitative assessments done by the evaluators. The rapporteurs' scoring was considered the final scoring as it includes the complementary information collected in January 2023.

3.4. Scoring

Quantitative scores ranged between 0 and 10, with 0 being the lowest and 10 the highest scoring. The evaluation team followed the scheme adopted by the SGPP:

Table 1. Scoring scheme

Points	Rating	Description
0-1	Very poor	The practice fails to address the criterion or cannot be judged due to missing or incomplete information.
2-3	Poor	The criterion is inadequately addressed, or there are serious inherent weaknesses.
4-5	Fair	The practice broadly addresses the criterion, but there are significant weaknesses.
6-7	Good	The practice addresses the criterion well but has a few shortcomings.
8-9	Very good	The practice addresses the criterion very well but has a few shortcomings.

10	Excellent	The practice successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.
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3.5. Scoring thresholds

The evaluation is sequential, starting with the exclusion criteria. Threshold levels apply to all sub-criteria under each of the three criteria groups: exclusion, core, and qualifier criteria.

Altogether a best practice can reach a maximum of 300 points. By comparison, a promising practice can reach a maximum of 250 points. All practices that receive at least 206 points are considered “best”. Practices that receive at least 171 points are considered “promising”. In sum, the thresholds for best practices are higher than those for promising practices, as follows:

Table 2. Scoring thresholds for best and promising practices

Criteria	Best practice	Promising practice
Exclusion criteria	81 out of 120 points	81 out of 120 points
Core criteria	58 out of 80 points	36 out of 50 points
Qualifier criteria	67 out of 100 points	54 out of 80 points
Total	206 out of 300 points	171 out of 250 points
Criteria	Best practice	Promising practice
Exclusion criteria	81 out of 120 points	81 out of 120 points

3.6. Selecting five practices

After the completion of the evaluation, the 11 practices with the highest number of points according to the evaluation were presented to health authorities during the validation workshop on 16 February 2023. During the workshop, health authorities were asked to vote on the practices that they would like to learn more about during an onsite visit. Participation from Member States was relatively high: 33 representatives of health authorities from 19 Member States joined. The workshop was also attended by HaDEA, DG SANTE, and the ECDC. Further workshop details and the results of the polling are presented in chapter 4.

The objective of the workshop was to validate details on the presented practices to Member State health authorities, give them the opportunity to ask each other questions about the presented practices, and collect their feedback about vaccination barriers they encounter and their interest in other Member States’ practices. To meet these objectives, the aim of the workshop was to create an interactive environment that allowed health authorities to actively participate and freely exchange views and information among each other. Therefore, the 2-hour time planning was rigorously designed and planned to avoid participant fatigue. The detailed agenda is available in Annex 2.

The workshop activities included:

- ◆ **an introductory segment** with remarks by HaDEA and Kantar Public, presentations on the evaluation team (evaluators and rapporteurs), a step-by-step explanation of the evaluation approach, and a presentation of the preliminary vaccination barriers identified through Task 1.
- ◆ **presentations of the 11 practices.** The rapporteurs were selected to present the practices since they had an in-depth understanding of the practices through the evaluation but could also maintain an objective view when presenting.
- ◆ **3 question and answer (Q&A) sessions** in which health authorities could pose questions about the presented practices and the practice owners (health authorities) would be given the

floor to answer these questions. These sessions were key moments for health authorities to provide further insight into their practices and connect with each other.

- ◆ **2 polls:** at the beginning and the end of the workshop. The polls provided valuable data for the final selection but also encouraged active participation.

The final selection of practices is based on the evaluation results (number of points) balanced by Member State interest. The Member States' interest in the practices was determined through a poll in the validation workshop: the final five practices received the highest number of votes in the poll. Cases in which multiple practices received the same number of votes, those practices which had a higher quantitative scoring in the evaluation were selected.

4. The five selected practices

The tables in this chapter present each of the five selected practice in detail, including the:

- ◆ title;
- ◆ country of origin;
- ◆ governance level;
- ◆ vaccine(s) covered;
- ◆ barriers that can be removed by the practice;
- ◆ target group(s);
- ◆ approach;
- ◆ vaccination journey(s) addressed;
- ◆ justification for selection;
- ◆ quantitative scoring.

All the five selected practices surpassed the best practice threshold in total scoring. Many of them, however, only achieved the promising practice threshold for the core criteria. Therefore, all five selected practices are classified as **promising practices**, missing the mark to qualify as best practices by a maximum of only 6 points.

As detailed in the sections below, the five selected practices cover all vaccines under the scope of the project (MMR, meningitis, polio, HPV, tetanus, COVID-19, influenza) and broadly cover all five vaccination journeys, namely:

- ◆ Journey 1: A parent/legal guardian getting their child vaccinated for MMR (measles, mumps, rubella), meningitis, or polio;
- ◆ Journey 2: A parent/legal guardian getting their child vaccinated for HPV (human papillomavirus);
- ◆ Journey 3: An adult getting vaccinated for COVID-19;
- ◆ Journey 4: An adult getting a booster vaccine for tetanus;
- ◆ Journey 5: An elderly or medically vulnerable person getting vaccinated for seasonal influenza.

They also offer a wide variety of interesting, creative interventions that can be transferred to other Member States and target different population groups, including hard-to-reach groups. Finally, the selected practices are regional and national approaches from Spain, the Netherlands, Ireland, Italy, and Denmark.

Table 3. Legend - threshold signifiers








Legend: Threshold signifiers

For a better illustration of the quantitative scoring results (total score, exclusion criteria, core criteria, qualifier criteria), symbols are used in this report. Star symbols denote that the practice passed either the promising practice or the best practice threshold. If the practice did not pass a threshold, it is marked with an x.

★	The practice passed the best practice threshold.
☆	The practice passed the promising practice threshold but did not surpass the best practice threshold.
×	The practice did not pass any thresholds.

4.1. Practice 1: School vaccination programme in Murcia region (Spain)

Table 4: Practice 1: School vaccination programme in Murcia region (Spain)

School vaccination programme in Murcia region	Spain
	<p>Governance level: regional</p>
	<p>Funding source: regional funding</p>
	<p>Vaccine(s) covered: HPV, meningitis</p>
	<p>Barriers that can be removed by the practice: lack of information/awareness; digital skills gap among public; digital skills gap among health professionals; lack of (accessible) information for public; shortages of health care professionals; limited opening hours of vaccination points; contacting hard-to-reach groups.</p>
	<p>Target group: children, 11 years of age</p>
	<p>Approach of the practice: this is a school programme for HPV and meningococcal vaccines intended to increase vaccination rates. It transfers the adolescent vaccination against HPV and meningococcus (given at age 11) from health centres to schools, thereby promoting accessibility and equity.</p> <p>A letter is sent to the parents telling them about the vaccines and their importance, and requesting their consent to vaccinate their children (minors) in the school environment in their absence. School staff collect the consent letters and forward them to the health centre professionals to schedule the day when the vaccination will be carried out. To increase outreach, information about the vaccination has been translated into several languages including Arabic for the Arabic-speaking population in the region.</p> <p>The practice shows that the administration is no different from any other vaccine performed outside a health centre, but the process before and after requires organisational support. This is set out in a protocol detailing the responsibilities of each participant in the vaccination process, from circulating information to parents, through obtaining consent to administering the vaccine. The protocol also defines the necessary resources, the activities that need to be carried out, and an approximate schedule for the deployment of the campaign.</p>
	<p>Vaccination journey(s) covered:</p> <ul style="list-style-type: none"> ◆ Journey 1 for meningitis: a parent/legal guardian getting their child vaccinated for MMR, meningitis, or polio.

- ◆ Journey 2: a parent/legal guardian getting their child/teenager vaccinated for HPV.








Reasons for selection:

- ◆ Removes barriers for parents struggling with booking systems or the opening hours of vaccination centres.
- ◆ Vaccines offered at school are easily accessible, and parents are informed directly by school staff thus removing barriers to accessing vaccination information.
- ◆ Well implemented, clear assessment of key problems and solutions (i.e., hesitancy of parents, lack of (accessible) information about vaccination).
- ◆ The practice considers the local context – the Arabic-speaking population was identified as a hard-to-reach group in the region and was targeted with information in Arabic to enhance accessibility.
- ◆ Continuity of care between the health, social, and education sectors in the public domain with a multidisciplinary approach
- ◆ Collaboration and participation are promoted among all stakeholders including teachers and healthcare professionals, with the appropriate preparation and skills; and parents and children, with easily understood health information, encouraging their empowerment and self-care.

4.2. Practice 2: Mobile vaccination units to increase COVID-19 vaccination uptake (Netherlands)






Table 5: Practice 2: Mobile vaccination units to increase COVID-19 vaccination uptake (Netherlands)




MV units to increase COVID-19 vaccination uptake	Netherlands
	Governance level: national and regional
	Funding source: national funding
	Vaccine(s) covered: COVID-19
	Barriers that can be removed by the practice: restricted opening hours at vaccination points; difficulties in contacting hard-to-reach groups, and under-served areas, both rural and urban; digital skills gap among the public; digital skills gap among health professionals; and the lack of (accessible) public information.
	Target group: general population (neighbourhoods with low vaccination uptake)

	<p>Approach of the practice: vaccines were offered in vaccination buses on a drop-in basis with no appointment needed. This practice was developed through cooperation between national and regional stakeholders. The buses were centrally procured and coordinated by a national organisation and made available to regions with identified needs.</p> <p>The practice also relied on leaflets, flyers, and posters which were disseminated in the neighbourhood, and personal conversations between local people and health care workers and trusted neighbourhood role models (often in multiple languages and in culturally appropriate ways) to increase knowledge of and trust in vaccination.</p>
	<p>Vaccination journey(s) covered: Journey 3: adult vaccination for COVID-19</p>
	<p>Justification for selection:</p> <ul style="list-style-type: none"> ◆ Well developed, documented and evidence-driven. Practice has been evaluated and showed its effectiveness. ◆ Useful example for pandemic preparedness.

4.3. Practice 3: Offering the flu vaccine to children in three primary schools (Ireland)

Table 6: Practice 3: Offering the flu vaccine to children in three primary schools (Ireland)

Offering the flu vaccine to children in three primary schools	Ireland
	<p>Governance level: national</p>
	<p>Funding source: national funding</p>
	<p>Vaccine(s) covered: influenza (for children)</p>
	<p>Barriers that can be removed by the practice: shortages of health care professionals; limited opening hours at vaccination points; lack of information accessible to the public</p>
	<p>Target group: children and young people, 2-17 years of age</p>

	<p>Approach of the practice: all children and young people aged 2-17 are eligible for the free HSE nasal flu vaccine in Ireland. It is usually given by GPs or pharmacists; however, vaccination uptake has been very low. To increase uptake, a pilot was launched in three primary schools to administer the vaccine in a school setting.</p> <p>For this pilot, comprehensive information packs (leaflet, consent form, template letters) were circulated among parents by operational community health teams. The teams reviewed the returned documents and the health condition of the children, and then recommended personalised vaccination routes via GP, pharmacy, or the school.</p>
	<p>Vaccination journey(s) covered:</p> <p>Journey 5: an elderly or vulnerable person getting vaccinated for seasonal influenza – <i>Note: the practice does not directly cover this journey since it focuses on influenza vaccination for children rather than elderly and vulnerable people. However, due to the great interest of health authorities in this practice and flu vaccinations for children, it is included in the final selection.</i></p>
	<p>Justification for selection:</p> <ul style="list-style-type: none"> ◆ Well-designed and effective – the results of the pilot show that vaccination uptake in schools increased significantly compared with uptake outside the school setting. ◆ Includes a description of resources needed to guide future pilots. ◆ Relatively easy to transfer to other settings because the approach is straightforward and could be replicated by many other Member States.

4.4. Practice 4: Su.Pr.Eme (Italy)

Table 7: Practice 4: Su.Pr.Eme (Italy)

Su.Pr.Eme	Italy
	<p>Governance level: regional</p>
	<p>Funding source: national and regional funding</p>
	<p>Vaccine(s) covered: COVID-19</p>
	<p>Barriers that can be removed by the practice: lack of (accessible) information for public; reaching hard-to-reach groups; out-of-pocket payments; digital skills gap among public; digital skills gap among health professionals</p>
	<p>Target group: undeclared migrants, seasonal workers</p>



Approach of the practice: The Su.Pr.Eme project targets undeclared and seasonal workers from third countries to overcome stigma and address the vulnerability of these migrant workers. Su.Pr.Eme is an integrated action plan to overcome all forms of labour exploitation, marginalisation, and vulnerability among migrant workers. It offered the Apulian Regional Agency for Health and Social Care (AReSS) the opportunity to define and develop a model of health and social care in informal settlements ('ghettos').

In this practice, mobile outpatient units were organised at which health care and vaccinations are provided to workers. It focuses on prevention and health care, as well as health and social status monitoring. The practice is implemented in close collaboration with NGOs which act as the front office, offer guidance, remain in contact with the migrants, and also support GPs.



Vaccination journey(s) covered:

Journey 3: an adult getting vaccinated for COVID-19



Reason for selection:

- Effectively targets a hard-to-reach, vulnerable population group.
- Innovative, unique approach in collaboration with NGOs on the ground.

4.5. Practice 5: Communication initiatives including reminder schemes to support childhood immunisation (Denmark)

Table 8: Practice 5: Communication initiatives including reminder schemes to support childhood immunisation (Denmark)

Childhood immunisation/vaccination programme	Denmark
	Governance level: national
	Funding source: national funding
	<p>Vaccine(s) covered:</p> <p>3 months: diphtheria, tetanus, whooping cough, polio and Hib and pneumococcal disease</p> <p>5 months: diphtheria, tetanus, whooping cough, polio and Hib and pneumococcal disease</p>

12 months: diphtheria, tetanus, whooping cough, polio and Hib and pneumococcal disease

15 months: MMR: measles, mumps and rubella

4 years: MMR: measles, mumps and rubella

5 years: diphtheria, tetanus, whooping cough, polio booster

12 years: HPV (2 doses)



Barriers that can be removed by the practice: inefficient or ineffective data collection; inefficient/lack of unified immunisation monitoring and information system; lack of (accessible) information for public.



Target group: parents to children aged 3 months to 12 years.





Approach of the practice: this vaccination programme includes a reminder scheme, vaccination ambassadors, communication campaigns, and a research study to demonstrate the effectiveness and outcomes of the practice. In Denmark, all recommended childhood vaccinations are administered free of charge by general practitioners. However, vaccination rates for MMR and diphtheria-tetanus-pertussis-polio have been below 90%, mainly due to parents forgetting the vaccination. Therefore, reminder schemes based on data from civil registries and public health databases have been introduced for all childhood vaccinations.

Through digital reminders, parents are notified when it is time for their child to get vaccinated and again if the vaccination time has passed but their child has not received the vaccination as planned. This practice is based on civil registries and public health databases data, allowing Danish health authorities to monitor vaccination uptake, including the number of vaccinations administered by general practitioners, and the type and number of side effects recorded.

Vaccination ambassadors play a key role in reaching out to local communities through dialogue-based approaches to address concerns about vaccination. Health visitors regularly meet the families and children in their district and built up a strong level of trust. They work with pregnant women and visit new-borns multiple times at home during the first year of life. They meet the children again at kindergarten and school. Health visitors are able to address concerns in a trusting atmosphere and are in a perfect position to bring up the topic of vaccination.

In 2017 the information awareness campaign *Stop HPV: get vaccinated* was launched jointly by the Danish Health Authority, the Danish Cancer Society, and the Danish Medical Association. The initiative was to provide nuanced and evidence-based information about the HPV vaccine and increase immunisation coverage following a decline in uptake. The campaign was extended to include boys in 2019, meaning that boys, like girls, now receive the HPV vaccination free of charge if they were born in the latter half of 2007 or later. The campaign ended in late 2021

	<p>following the successful restoration of HPV immunisation coverage.</p> <p>Vaccination journey(s) covered: journey 1 for MMR, polio: a parent or legal guardian getting their child vaccinated for MMR, meningitis, or polio.</p> <p>Journey 4: An adult getting a booster vaccine for tetanus – <i>Note: this journey is not directly covered by the practice, which targets tetanus vaccinations among young children instead of adults. However, it is included because it is the only one of the five selected journeys covering tetanus.</i></p>
	<p>Justification for selection by evaluators:</p> <ul style="list-style-type: none"> • Well documented with approach and results shared in academic paper. • Effectiveness and vaccination increase demonstrated in academic paper. • Includes tetanus and polio which have not been well covered by practices received from other Member States. • Use of database and public health data to systematically organise and implement a vaccination intervention.

5. Workshop results and analysis

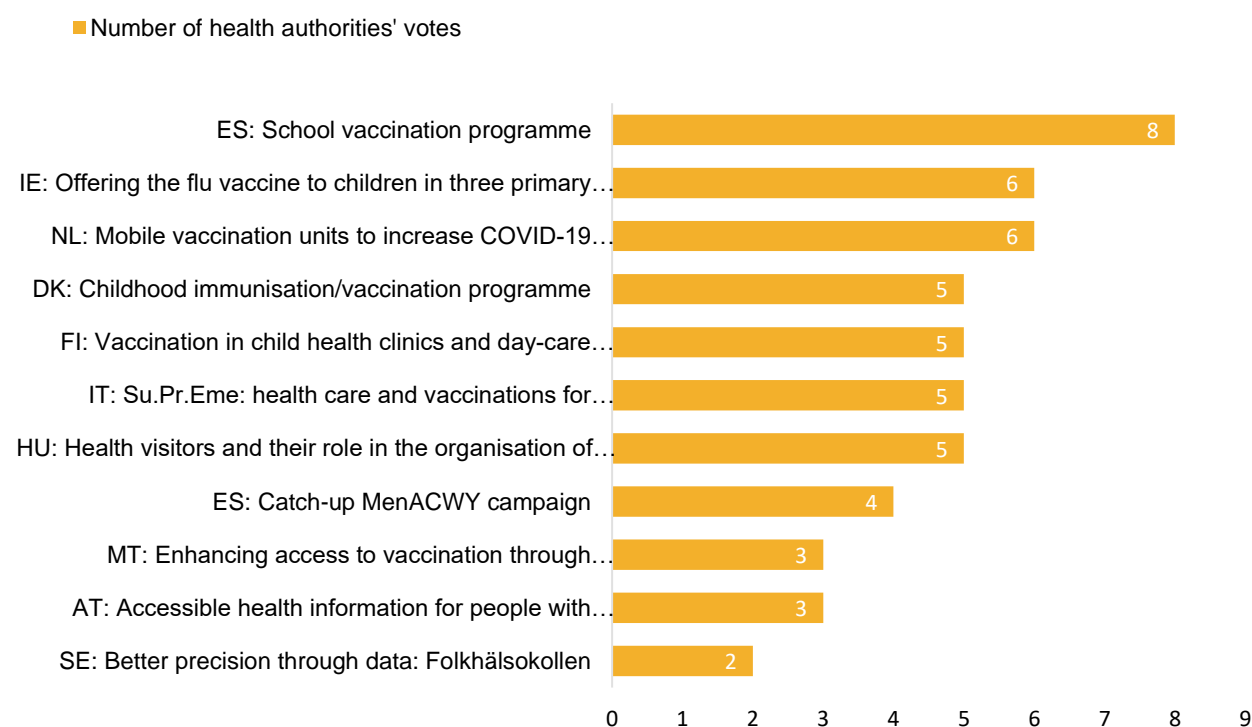
The workshop was aimed at Member State health authorities. Registration and participation rates were overall high, showing interest from the Member States. In total, 44 participants from 22 Member States registered for the workshop (AT, BE, BG, DK, EE, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PT, RO, SE, SI, SK). Of these, 33 participants from 19 Member States attended (AT, BE, DK, EE, ES, FI, FR, HR, IE, HU, LT, LU, LV, MT, NL, RO, SE, SI, SK), achieving relatively good representation.

During the validation workshop with health authorities on 16 February 2023, two polls were launched, asking Member States health authorities about their most pressing barriers to vaccination and the presented practices that they would be most interested in learning more about during an onsite visit (Task 4). Overall, 11 practices from 10 Member States were presented in the workshop. All target mentioned groups (all age groups, children, adolescents, elderly) plus hard-to-reach groups were covered by the 11 practices. All seven vaccinations under the project scope (MMR, meningitis, polio, HPV, tetanus, COVID-19, influenza) were also covered by the 11 practices.

The figure below shows the results of the poll on the practices that health authorities would like to learn about most during the onsite visits. Health authorities could vote for their two top choices. A total of 26 votes were recorded. The most voted for practices came from Spain, Ireland, and the Netherlands. These results are important because they fed into the decision-making process to select the final five practices, confirming buy-in from the Member States. Both the poll results and the scores from the evaluation influenced which practices were selected. The practices with the highest number of votes in the poll were first preliminarily determined as finalists. Cases in which several practices received the same number of votes among the finalists, those practices which had a higher scoring in the evaluation were then selected as the top five. The selected five practices received some of the highest scores in the evaluation, as demonstrated in chapter 4 on the five selected practices and chapter 7 on the practices which were not selected.

Figure 4. Practices that Member State health authorities would like to learn more about during onsite visits

Practices that Member State health authorities would like to learn more about during onsite visits



During the workshop, health authorities were also asked which barriers are the most pressing in their countries. Health authorities could select one top choice from a list of 14 administrative, practical, and physical barriers. In total, 23 answers were collected.

The comparison between the poll results and the barriers that can be removed by the five selected practices shows that all of the most pressing barriers identified by health authorities except 'lack of training for health practitioners' (which received only 1 vote) could be removed by the five selected practices. In other words, the needs of Member States can potentially be addressed by the five selected practices. The most pressing needs of Member States are reflected in detail below in the poll results in Figure 5.

below shows the main types of barriers that can be removed by the selected five practices. Each practice can address multiple barriers. Further, all five practices can address the barrier 'lack of (accessible) information for public'.

Figure 5. Most pressing barriers for Member State health authorities

Most pressing barriers for Member State health authorities

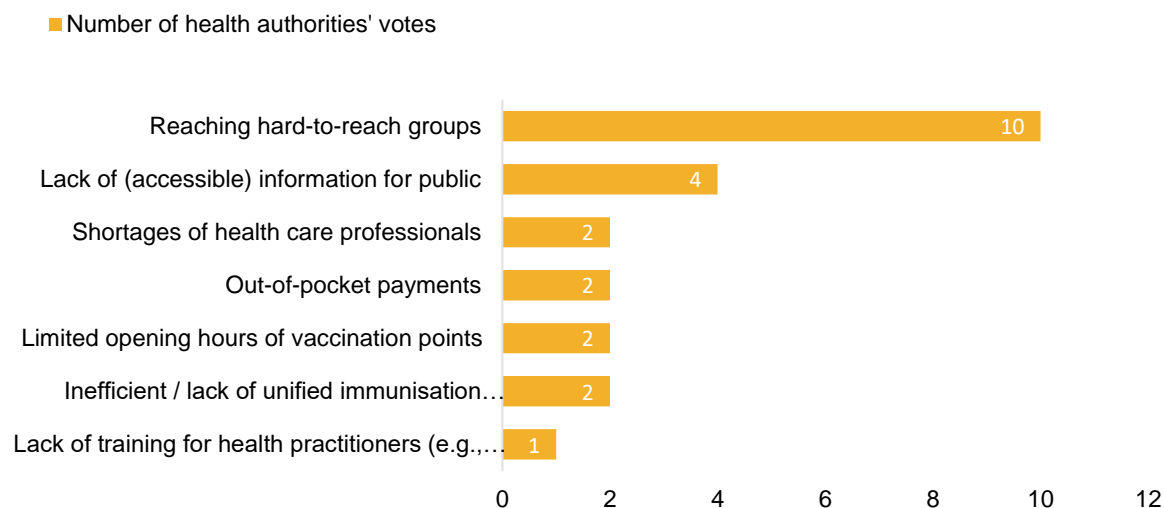
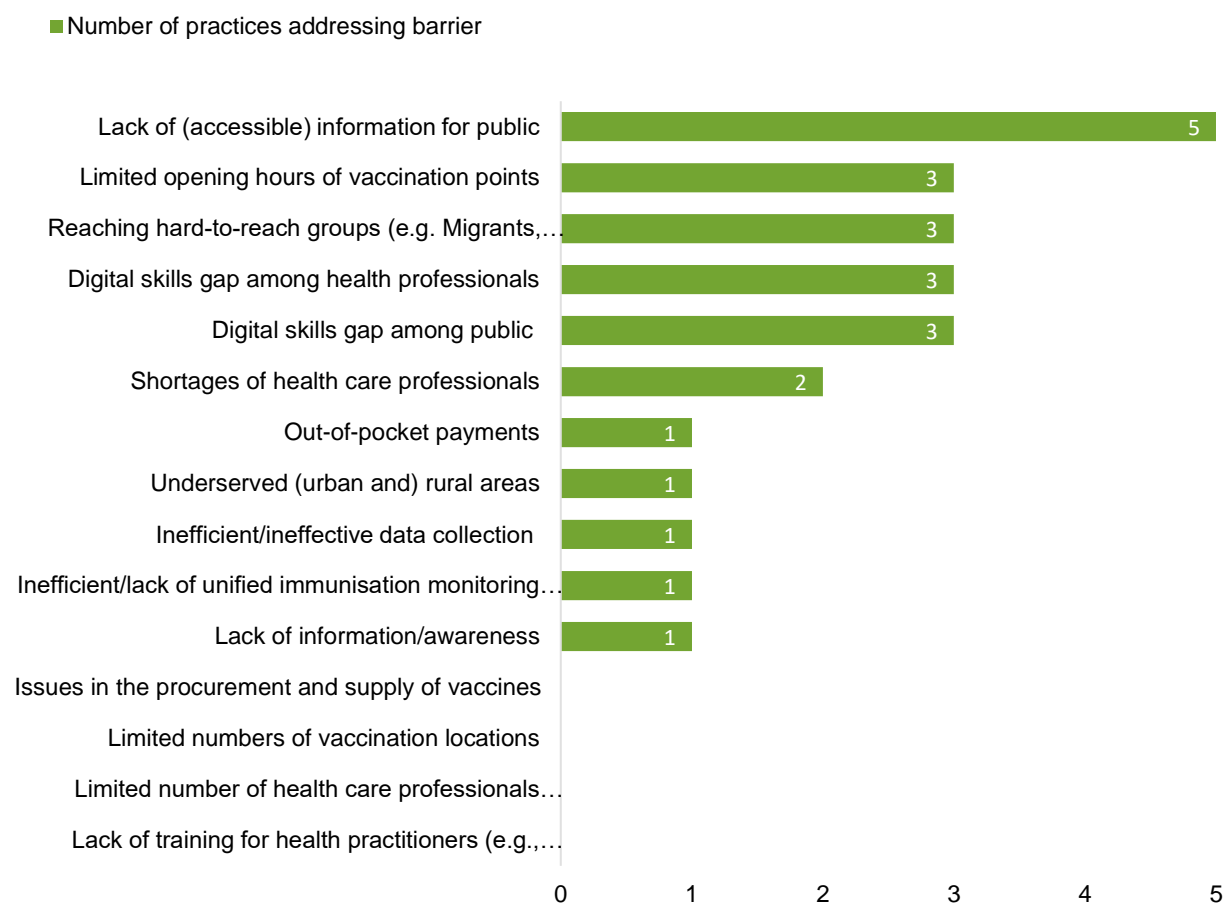


Figure 6. Barriers that can be addressed by the 5 selected practices

Barriers that can be addressed by the 5 selected practices



6. Implications and next steps for Tasks 4 and 5

Based on the results of Task 3, the next step will be organising the onsite visits (Task 4) aiming at the second quarter of 2023 for these to happen. The health authorities that will be hosting the onsite visits have been informed on 2 March 2023 and will now be fully supported by the project team in organising the visit.

While engagement by health authorities who submitted practices was relatively high so far, it is of crucial importance to keep the momentum. Therefore, the health authorities whose submitted practices have not been selected will be immediately informed individually. At the same time, they will also be given the opportunity to participate in a peer clinic to discuss their practice with colleagues following a similar approach and be invited to join the study visits.

In addition, in view of reengaging some of the health authorities who committed during the proposal stage, the project team will be reaching out more broadly again with timely save-the-dates, tailored invitations to the onsite visits, the upcoming newsletter and updated information on the website to secure interest in the participation in the onsite visits and the pilots (Task 5). However, considering that health authorities have generally signalled that they are struggling with capacity, it can be expected that attendance of the onsite visits (five visits during a period of three to four months) may be lower than initially foreseen. It is not expected that this will impact on the piloting phase, as the health authorities who are more engaged are signalling their interest in piloting a practice.

7. Practices which were not selected

This chapter provides a brief overview of the 19 practices which were not selected, justifications why they were not selected, and their quantitative scores. Practices whose titles are marked with an asterisk (*) were candidates in the pre-final selection and presented during the validation workshop with health authorities on 16 February 2023.

The practices highlighted in **blue** could potentially be included in the onsite visits that will be arranged for the five selected practices, as they are in the same country or region as one of the five selected practices. As foreseen, these practices will be included as remarkable in the onsite visits ensuring that participants benefit from a wider learning and capacity building experience. It is to be noted, that the practices in blue also performed well in the evaluation and passed the necessary thresholds, as demonstrated below.

Table 9. Practices which were not selected

Practice title	Country	Justification	Total score	Exclusion criteria	Core criteria	Qualifier criteria
Catch-up MenACWY campaign *	Spain	This practice performed very well both in the quantitative and qualitative assessment. The total score of the practice was the second highest of all evaluated practices, making it a good candidate. By contrast, the practice did not rank among the top choices in the polls conducted with health authorities during the validation workshop which is why it is not in the final selection. However, a study visit will be arranged in Murcia, Spain, to present Practice 1 of the five selected practices. As the 'Catch-up MenACWY campaign' is also from Murcia, Spain, there is a possibility to include this practice in the onsite visit.	247 ★	108 ★	57 ☆	82 ★
Mass vaccination of the population in Ireland with COVID-19 primary course vaccinations and overcoming the physical obstacles to successful vaccination	Ireland	While an interesting, well-documented practice, there are already similar practices in the final selection which are better examples and provide more added value. However, the practice performed well in the evaluation and could enrich the mutual learning experience of health authorities. Therefore, there is a possibility to	188 ☆	82 ★	47 ☆	59 ☆

Practice title	Country	Justification	Total score	Exclusion criteria	Core criteria	Qualifier criteria
		include this practice in the onsite visit which will be arranged for selected Practice 3.				
Accessible health information for deaf people in Vienna *	Austria	While the practice performed well in the evaluation, it was not selected among the top choices by health authorities during the validation workshop.	229 ★	87 ★	60 ★	82 ★
Enhancing access to vaccination through community centres and private practices *	Malta	While an interesting practice that is well documented, it was not selected among the top choices by health authorities during the validation workshop.	224 ★	88 ★	54 ☆	82 ★
Vaccination of children in child health clinics and day-care centres *	Finland	The practice is interesting and was relatively popular among health authorities in the poll during the validation workshop. It, however, shares some similarities with the selected Irish practice (offering the flu vaccine to children in three primary schools). Further, the practice was implemented in a remote region in Finland, which would make organising an onsite visit challenging. Finally, the practice scored lower than the other selected practices in the quantitative evaluation.	210 ★	93 ★	62 ★	55 ☆
Health visitors and their role in the organisation of routine childhood vaccinations *	Hungary	The practice is interesting and was relatively popular among health authorities in the poll during the validation workshop, it scored lower than the other selected practices in the quantitative evaluation. Further, the practice could be difficult to transfer to other settings, since it is strongly embedded in the Hungarian legislation. Finally, the practice did not reach the promising practice threshold for the core criteria.	175 ☆	85 ★	21 ✕	69 ★

Practice title	Country	Justification	Total score	Exclusion criteria	Core criteria	Qualifier criteria
Better precision through data: Folkhälsokollen *	Sweden	This practice received the highest scoring in the evaluation, making it a best practice. However, this practice received the least number of votes by health authorities in the poll during the validation workshop. A reason for this could be that the data analytics-focused approach of the practice may be difficult to transfer to other settings and possibly deterred some health authorities.	253 ★	114 ★	60 ★	79 ★
Deployment of the Spanish COVID vaccination strategy in Murcia region	Spain	While an interesting strategy, there are other approaches in the selection which are similar but are better examples. Since there are also already two practices from Murcia region (Spain) in the selection, this practice was not included to avoid overrepresentation and bias. It could nevertheless be touched upon during the onsite visit to Murcia.	147 ✕	71 ✕	45 ✕	31 ✕
Promotion of vaccination against measles, mumps and rubella (MMR)	Lithuania	As this practice targets confidence barriers, and includes elements undertaken also in other countries in similar ways, this practice was not taken forward.	121 ✕	57 ✕	28 ✕	36 ✕
HPV vaccination experiment in Grand Est area	France	A lack of information in the practice submission could not be filled. This makes the practice difficult to present in an onsite visit and reproduce in a pilot. HPV is already covered well by other practices.	91 ✕	48 ✕	11 ✕	32 ✕
Several best practices on COVID-19 vaccination	France	This is a whole COVID-19 pandemic vaccination programme. There is a lack of information of the different individual actions which could not be retrieved despite an interview with health authorities. Also, many of the practices are no longer used and it is not foreseen to pursue them in any way due to lack of funds or no clear cost/benefit.	83 ✕	42 ✕	11 ✕	30 ✕

Practice title	Country	Justification	Total score	Exclusion criteria	Core criteria	Qualifier criteria
Pop-up COVID vaccination centres in Eure-et-Loire, France	France	The practice lacks some more detailed information, which could not be retrieved despite an interview with the national health authorities. The practice only ran during the pandemic and is not implemented anymore. It is also similar to other practices and does not provide innovation or added value compared to other practices.	144 ✕	85 ★	20 ✕	39 ✕
Mobile vaccination teams for vaccination in the homes of immobile, less mobile people in the City of Zagreb by the Croatian Institute of Public Health	Croatia	Although it is an interesting practice, there is no evidence of unique elements that make this practice different from those in other Member States. Hence, transferring this practice will be difficult since it does not offer a new approach that other Member States have not tried yet.	76 ✕	44 ✕	9 ✕	23 ✕
Vaccination in buses as an example of good practice in overcoming physical obstacles in vaccination	Croatia	While the practice is interesting for vaccination in remote/rural areas, there are other examples of vaccination buses in the selection which are better documented, showing evidence of effectiveness (e.g. Netherlands). By contrast, the vaccination bus practice has shown very limited effectiveness and increase in vaccination rates in Croatia. Due to this, the practice has been discontinued and therefore was not selected in the evaluation.	52 ✕	24 ✕	12 ✕	16 ✕
Supporting school health care providers in providing education info about vaccines and diseases they prevent with a special focus on HPV vaccination	Estonia	The practice has not been implemented yet. It is a planned pilot for the future and, hence, was not evaluated.	0 ✕	0 ✕	0 ✕	0 ✕
The efforts of Slovenian Society of Primary Care	Slovenia	The practice has limited relevance as it addresses vaccine hesitancy through a communication strategy	78 ✕	24 ✕	32 ✕	22 ✕

Practice title	Country	Justification	Total score	Exclusion criteria	Core criteria	Qualifier criteria
Paediatricians to increase vaccination coverage in Slovenia		involving school doctors, primary care paediatricians, and the Slovenian Ministry of Health. There is also a lack of documentation on the practice which limits its transferability significantly.				
Functional and geographical capillarity access of vaccination	Portugal	The practice is a relatively common vaccination programme, which offers only limited added value compared to other practices. While efforts were made to conduct an interview with the relevant health authority to fill information gaps, these could not be filled.	104 ×	45 ×	24 ×	35 ×
Social mobilisation for the implementation of micro-influencers	Portugal	While the practice is an innovative approach, it rather tackles confidence than convenience barriers.	106 ×	50 ×	11 ×	45 ×
Clinical guidance to substitute the need of medical prescription for access to vaccination	Portugal	While an interesting practice that had potential for further exploration, no complementary information could be collected through an interview with the relevant health authority. Hence, limited detail and evidence prevents taking this practice further for onsite visits or piloting.	50 ×	26 ×	3 ×	21 ×

8. Annexes

8.1. Annex I: Evaluation forms

The excel file containing all evaluation forms is attached separately.

The labelling of the practices in the evaluation forms includes their identification number in the Best Practice Portal⁴ and corresponds to the practice titles as follows:

Table 10. Practice labelling scheme

ID in evaluation form	Practice title
1. Ireland 2198	Mass vaccination of the population in Ireland with COVID-19 primary course vaccinations and overcoming the physical obstacles to successful vaccination
2. Estonia 2180	Supporting school health care providers in providing education info about vaccines and diseases they prevent with a special focus on HPV vaccination
3. France 2192	HPV vaccination experiment in Grand Est area
4. Croatia 2195	Mobile vaccination teams for vaccination in the homes of immobile, less mobile people in the City of Zagreb by the Croatian Institute of Public Health
5. Sweden 2194	Better precision through data: Folkhälsokollen
6. Spain 2146	Catch-up MenACWY campaign
7. Spain 2189	School vaccination programme in Murcia region
8. Spain 2191	Deployment of the Spanish COVID vaccination strategy in Murcia region
9. Austria 2178	Accessible health information for deaf people in Vienna
10. Finland 2171	Vaccination of children in child health clinics and day-care centres
11. Denmark 2190	Communication initiatives including reminder schemes to support childhood immunisation
12. Italy 2185	Su.Pr.Eme
13. Malta 2162	Enhancing access to vaccination through community centres and private practices
14. Croatia 2163	Vaccination in buses as an example of good practice in overcoming physical obstacles to vaccination
15. Hungary 2183	Health visitors and their role in the organisation of routine childhood vaccinations
16. Slovenia 2166	The efforts of Slovenian Society of Primary Care Paediatricians to increase vaccination coverage in Slovenia

⁴ <https://webgate.ec.europa.eu/dyna/bp-portal/>

ID in evaluation form	Practice title
17. Lithuania 2177	Promotion of vaccination against measles, mumps and rubella (MMR)
18. France 2158	Several best practices on COVID-19 vaccination
19. France 2203	Pop-up COVID vaccination centres in Eure-et-Loire, France
20. Netherlands 2204	Mobile vaccination units to increase COVID-19 vaccination uptake
21. Ireland 2176	Offering the flu vaccine to children in three primary schools
22. Portugal 2209	Functional and geographical capillarity access of vaccination
23. Portugal 2210	Social mobilisation for the implementation of micro-influencers
24. Portugal 2211	Clinical guidance to substitute the need of medical prescription for access to vaccination

8.2. Annex II: Validation workshop agenda

The validation workshop agenda was as follows:

Table 11. Validation workshop agenda

Time	Activity	Speakers
10:00 – 10:05	Welcome	Kantar Public
10:05 – 10:10	Opening remarks	HaDEA, Kantar Public
10:10 – 10:13	Presentation of the evaluators and rapporteurs	Kantar Public
10:13 – 10:16	Presentation of the evaluation approach	Kantar Public
10:16 – 10:26	Presentation of the identified barriers and poll on barriers	Kantar Public
10:26 – 10:31	Presentation 1: Offering the flu vaccine to children in three primary schools, Ireland	Kantar Public
10:31 – 10:36	Presentation 2: Health visitors and their role in the organisation of routine childhood vaccinations, Hungary	Kantar Public
10:36 – 10:41	Presentation 3: Institutional communication strategy of Puglia region, Italy	Kantar Public
10:41 – 10:46	Presentation 4: Scholar vaccination programme in Murcia region, Spain	Kantar Public
10:46 – 10:52	Q&A	Kantar Public (moderation), health authorities (discussion)
10:52 – 10:57	Presentation 4: Better precision through data: Folkhälsokollen, Sweden	Kantar Public

Time	Activity	Speakers
10:57 – 11:02	Presentation 5: Vaccination of children in child health clinics and day-care centres, Finland	Kantar Public
11:02 – 11:07	Presentation 6: Catch-up MenACWY campaign in Murcia region, Spain	Kantar Public
11:07 – 11:14	Q&A	Kantar Public (moderation), health authorities (discussion)
11:14 – 11:20	BREAK	Kantar Public
11:20 – 11:25	Presentation 7: Accessible health information for deaf people in Vienna, Austria	Kantar Public
11:25 – 11:30	Presentation 8: Enhancing access to vaccination through vaccination from community centres and private practices, Malta	Kantar Public
11:30 – 11:35	Presentation 9: Mobile vaccination units to increase COVID-19 vaccination uptake, Netherlands	Kantar Public
11:35 – 11:40	Presentation 10: Communication initiatives including reminder schemes to support childhood immunisation	Kantar Public
11:40 – 11:47	Q&A	Kantar Public (moderation), health authorities (discussion)
11:47 – 11:55	Poll on presented practices	Kantar Public
11:55 – 12:00	Closing remarks	Kantar Public