



CO-CREATING/CO-SELECTING TOOLS FOR PILOTING

Milestone M6.3



This project is co-funded by the European Union's Health Programme 2014-2020.

Project no. 101018210
Project acronym: IMMUNION
Project title: Improving IMMunisation cooperation in the European UNION
Instrument: European Union 3rd Health Programme
Start date of project: 1 April 2021
Duration: 24 months
Milestone title: M6.3 Co-creating/co-selecting tools for piloting
Due date of milestone: M20 (November 2022)

Organisation name of lead contractor for this milestone: National Institute of Health (ISS), Italy

Author list:

| Name | Organisation |
|---|---|
| Paola De Castro Valentina Possenti Raffaella Bucciardini Antonio Mistretta Benedetta Mattioli Anna Maria Giammarioli Francesco Corea | National Institute of Health (ISS), Italy |
| Camelia Claici Grațiana Chicin Roxana Lupu Petru Milos | National Institute of Public Health (INSP), Romania |
| Nikoletta Papaevgeniou Pania Karnaki Dina Zota | The Institute of Preventive Medicine, Environmental and Occupational Health (PROLEPSIS), Greece |
| Kristīne Ozoliņa Līva Aumeistere Ilze Straume Berta Pulmane | Centre for Disease Prevention and Control (CDPC), Latvia |

| Dissemination level | | |
|---------------------|--|---|
| PU | Public | × |
| CO | Confidential, restricted under conditions set out in Model Grant Agreement | |
| CI | Classified, information as referred to in Commission Decision 2001/844/EC | |



DOCUMENT HISTORY

| VERSION | DATE | NOTE | ISSUED BY |
|---------|------------------|---------------|-----------------------|
| 0.1 | 04 November 2022 | First version | ISS |
| 1.0 | 22 November 2022 | Reviewed | INSP, PROLEPSIS, CDPC |
| 1.1 | 24 November 2022 | Reviewed | EuroHealthNet |
| 1.2 | 30 November 2022 | Submitted | EuroHealthNet |

Disclaimer

The content of this publication represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the European Health and Digital Executive Agency (HaDEA) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

While the information contained in the documents is believed to be accurate, the authors(s) or any other participant in the IMMUNION consortium make no warranty of any kind about this material including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Neither the IMMUNION Consortium nor any of its members, their officers, employees, or agents shall be responsible or liable in negligence or otherwise howsoever in respect of any inaccuracy or omission herein. Without derogating from the generality of the foregoing neither the IMMUNION Consortium nor any of its members, their officers, employees, or agents shall be liable for any direct or indirect or consequential loss or damage caused by or arising from any information advice or inaccuracy or omission herein.

Copyright message

©IMMUNION Consortium, 2021-2023. This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both. Reproduction is authorised provided the source is acknowledged.



Table of Contents

| | | |
|-----|---|----|
| 1 | Introduction | 5 |
| 2 | Methods | 6 |
| 3 | Overview of objectives and target groups | 7 |
| 4 | Country reports..... | 9 |
| 4.1 | Pilot in Greece..... | 9 |
| 4.2 | Pilot in Italy..... | 11 |
| 4.3 | Pilot in Latvia..... | 13 |
| 4.4 | Pilot in Romania..... | 15 |
| 5 | Final considerations | 19 |
| 6 | Annexes..... | 20 |
| | Annex 1: Template to plan actions | 20 |
| | Annex 2. WP6 Targets and indicators related to Task 6.4 | 21 |



1 Introduction

The general objective of the IMMUNION ("Improving IMMunisation cooperation in the European UNION") Work Package (WP) 6 is to create awareness and empower target populations on the benefits of vaccine uptake for individual and public health. It focuses on four countries: Greece, Italy, Latvia and Romania.

After the development of the first three tasks (1. elaboration of an *ad hoc* [Reference Grid](#) on the determinants of vaccine hesitancy; 2. gathering of [Vaccine Communication Tools](#) that are available in a [searchable online database](#) on a dedicated page of the Coalition for Vaccination website; 3. delivering [national multistakeholder roundtables](#) with associated media trainings), the focus of the final IMMUNION WP6 task (Task 6.4) is on the co-creation of new tools or co-selection of existing tools on vaccine communication, and the piloting of these tools.

This report provides:

- an overview of the methods underlying the process of developing this milestone;
- an analysis of the objectives and target groups across the four participating countries;
- detailed reports from each of the four countries;
- final considerations.

It is worth noting that several partners developed their pilots in collaboration with other initiatives (both international and national). This mutually beneficial cooperation aims to ensure that IMMUNION activities build on existing resources and networks where relevant, in order to strengthen the outcomes of the four pilots and help to amplify results. The cooperation can also help secure additional resources or budget for the pilots (not included in the IMMUNION project).

Overall, this task has further contributed to the overarching WP6 aim of improving vaccine communication/community engagement and increasing vaccine uptake.



2 Methods

As in the previous WP6 activities, the four participating partners (ISS, INSP, CDPC and PROLEPSIS) agreed on a procedure to ensure a common approach to developing the pilots across the four countries. This approach, and the activities carried out in each country, are detailed in four country reports (included in Section 4; template in Annex 1).

The reports provide input on the following areas:

- **Objective** and focus of pilot activity, including specific vaccine(s) under piloting if appropriate
- **Target** group(s) and reason for the selection, including if possible to what extent a focus on underserved populations has been developed
- **Process** of developing the pilot, providing information about how the pilot was (co)-created, which stakeholders were engaged, etc. – drawing on the work of the national stakeholder roundtables as appropriate
- **Main activities** (achieved or planned) to carry out within the scope of the pilot, describing the progress of activity up until November 2022 as well as in the final four IMMUNION months (M21-M24, up to March 2023)
- **Results** (achieved or expected, in the short/medium term)
- **Future outlook** intended, such as further exploitation and stakeholder engagement, both beyond the IMMUNION milestone itself and after the completion of the project.

According to IMMUNION project indicators, each pilot site is required to measure the impact of the pilot in terms of improved knowledge/awareness of the target groups as regards vaccination and its benefits, in a pre/post survey. The reporting template shared with all partners provided a few key questions which would need to be answered in the survey, as follows:

- Awareness and knowledge about vaccines and vaccinations (e.g., benefits, services available, side-effects, etc.)
- Attitudes towards vaccines and vaccinations (e.g., reduced vaccine hesitancy)
- Identification of structural or contextual barriers to vaccines and vaccinations
- Critical factors to vaccine communications (in terms of available tools or relating to difficulties in engaging with relevant stakeholders in the field).

Each partner was invited to tailor the questions and the survey to their specific contexts, according to the needs and feasibility of the different pilots. For instance, partners may opt to do only a post-survey rather than also a pre-survey, in order to reduce the burden on communities and increase the likelihood of input. In Greece, PROLEPSIS will carry out a focus group rather than a quantitative survey, given that focus groups are more likely to produce meaningful input amongst their target group (Roma population) than written questionnaires.

3 Overview of objectives and target groups

This section describes the objectives and target groups in the four pilot countries. Further details on the process and outcomes are included in each individual country report.

Objectives of the IMMUNION country-pilots

Table 1 presents the objectives of the pilots (planned or developed) in the four participating countries.

Table 1. Objectives of the IMMUNION country-pilots, 2022.

| | Objectives | Further details |
|----------------|---|--|
| Greece | to develop and pilot a new tool aiming to increase vaccine uptake among Roma communities | Problems concerning vaccination exist mostly when it comes to booster vaccinations as well as vaccines that need to be administered at a later age, and amongst more isolated and remote Roma communities. |
| Italy | to pilot a tool for raising vaccine awareness among secondary school-aged children, teachers and families | In Italy, vaccine-related issues are not properly addressed in schools despite the fact that schools represent an ideal setting to effectively reach out to several target groups (students but also teachers, families). |
| Latvia | to create and pilot a tool for raising HPV vaccine coverage in adolescents | The HPV vaccine was chosen because of low vaccine coverage rates and the implementation of state funded HPV vaccination for boys starting from 2022. |
| Romania | to improve access to and use of reliable and accurate information about vaccination in order to increase confidence and uptake in specific target populations; and to improve parents' knowledge and childhood vaccine(s) uptake. | The COVID-19 pandemic had an influence on the coverage of routine childhood immunisations due to cancellations or postponement of immunisation appointments. Restoring immunisation coverage of routine vaccines is crucial. |

All the pilot objectives indicated above are in line with the conclusions achieved in the national stakeholder roundtables delivered in the four participating countries during the month of June 2022.

Targets of the IMMUNION country-pilots

Table 2 provides more details on the target groups in each country. According to project indicators (detailed in Annex 2), at least two participating countries should aim to select or design a communication/community engagement tool for piloting specifically with vulnerable populations and underserved communities to boost their vaccine coverage and improve overall equity in vaccination. All of the pilots focus on underserved or vulnerable communities, to different extents (Greece exclusively, Italy, Latvia and Romania partially), as detailed below.

Table 2. Targets of the IMMUNION country-pilots, 2022.

| | Targets | Further details |
|----------------|--|--|
| Greece | Roma women of all ages, with a special focus on women of a younger age who are considered at an appropriate age for receiving specific vaccinations such as the HPV vaccine. | The target group will be reached through relevant projects PROLEPSIS is already working on. |
| Italy | Secondary school-aged children, their parents and teachers. | <p>The selection of this target group is considered as highly strategic according to a twofold perspective:</p> <ul style="list-style-type: none"> - the school setting is a privileged setting to tackle inequalities under several aspects; - students do not represent a stand-alone target group because they are necessarily interconnected to their families, so a broader coverage can be ensured. <p>Underserved population groups are somewhat included in the pilot.</p> |
| Latvia | <p>Adolescents: girls aged 12–18 and boys aged 12–15 (to whom state funded HPV vaccine is available).</p> <p>Secondary target group: their parents.</p> | <p>The target group will be assessed through the National Healthy Schools Network.</p> <p>Since there are schools in the Healthy Schools Network that are located not only in the biggest cities of Latvia but also in quite rural areas, those schools also will be included in the pilot. In those areas, vaccine coverage rates are usually lower than in other parts of the country, thus representing underserved groups.</p> |
| Romania | Parents | <p>Children are a vulnerable population because they lack the autonomy and decision-making capacity to ethically and legally consent to participate and to understand and assume the risks, and because of inequalities of power between adults and children.</p> <p>The activity includes as a target group vulnerable communities, such as those with low education, in whom vaccination coverage is usually lower.</p> |

4 Country reports

4.1 Pilot in Greece

1. Leading partner

PROLEPSIS Institute

2. Objective and focus of pilot activity

The objective of the activity is to develop and pilot a new tool aiming to increase vaccine uptake among Roma communities. Vaccination among Roma children according to research faces a number of barriers compared to non-Roma children (Papamichail et al., 2017). However, a qualitative study (not yet published) conducted by PROLEPSIS for the national project “Empowering Young Roma Women in matters of health, prevention and human rights: a new methodological approach” showed that the majority of Roma mothers who participated in this study were vaccinating their children with the recommended “basic” vaccines. Problems concerning vaccination exist mostly when it comes to booster vaccinations as well as vaccines that need to be administered at a later age (such as the HPV vaccine, the flu vaccine etc). In addition, vaccination barriers are more evident within more isolated and remote Roma communities (this was not a finding from the PROLEPSIS qualitative study as it did not include such remote communities). Additionally, not all Roma women in the study were aware that vaccines are also for adults and not only for children. There is no data on COVID-19 vaccination among Roma communities in Greece.

3. Target group(s)

The target group of the pilot are Roma women of all ages, with a special focus on women of a younger age who are considered at an appropriate age for receiving specific vaccinations such as the HPV vaccine. The target group will be reached through relevant projects PROLEPSIS is already working on, such as the national project “Empowering Young Roma Women in matters of health, prevention and human rights: a new methodological approach”, which aims to empower Roma women, as well as organizations (NGOs, universities, etc.) working with Roma populations on matters relating to common attitudes and habits that can have a negative impact on their health, the implementation of preventive medicine and the importance of human rights. This project is implemented within the Active citizens fund program, by the Prolepsis Institute in collaboration with the Department of Educational Studies of the National and Kapodistrian University of Athens.

4. Process of developing the pilot

The outcomes of the National Roundtable, that included health authority stakeholders, academia, scientific societies, health care and health communication experts, emphasised that none of the tools collected for the National toolkit were appropriate for the specific target group. They all agreed on the need to develop a tool that uses simple language and if possible, not including written content but rather using audio-visual means, e.g., a video.

Given the above, PROLEPSIS aims to develop a series of short videos that will promote recommended vaccinations. Roma women (as all women in society) have a multiplier effect, so through them, PROLEPSIS aims to reach the wider Roma population. Based on the discussions that took place between the stakeholders who participated in the National Roundtable, the videos should involve members of the Roma communities, for the target group to identify with the messages. Besides the members of the Roma communities and based on the results of the qualitative study conducted by PROLEPSIS (mentioned in section 1), which indicated that Roma women trust the advice coming from



non-Roma female health professionals, the videos will also involve specialised health professionals. The planning for the development of the material includes delivering a series of educational activities on vaccination targeting Roma women and aiming to raise awareness. At the end of these activities and based on specific scripts, videos will be filmed with “Roma participants-protagonists” sharing in their own way/language what they learned during the educating activities about the importance of vaccination. The developed new tools (videos) will then be used as part of educational sessions targeting Roma communities.

5. Principal activities (achieved or planned)

| | October | November | December | January | February | March |
|--|---------|----------|----------|---------|----------|-------|
| 1.Meeting to agree on details and planning | | | | | | |
| 2. Developing the educational material | | | | | | |
| 3. Educational activities | | | | | | |
| 4. Filming and editing videos | | | | | | |
| 5.Video piloting, focus groups and report | | | | | | |

6. Achieved or expected results

Focus groups will be conducted to collect qualitative data on the knowledge and perceptions about vaccination the participants obtained after the piloting of the developed tools. We expect that the developed tools (videos) will be well-received by the Roma communities participating in the pilot action and that participants/trainees will gain through these videos better knowledge about recommended vaccinations, so as to consider changing their attitudes towards less well-known vaccines.

In the long term and after distributing the tools through the IMMUNION national toolbox but also through the media and related health professionals and associations, we expect an overall increase in the relevant knowledge and uptake of recommended vaccines as well as the reduction of vaccination hesitancy among Roma communities.

7. Future outlook: further exploitation after IMMUNION

After piloting, the video series developed within the IMMUNION project can be shared through social media and can be communicated to the target groups through health professionals such as physicians, paediatricians, nurses, pharmacists, health visitors who serve Roma communities and through health associations such as the Pan-Hellenic Pharmaceutical Association, the College of Hellenic Paediatricians and different Medical Associations throughout Greece. The video series could be part of a bigger campaign that could be planned for the future. Additionally, communication experts can use the video series in their health campaigns and academia representatives can distribute the videos further to future clinicians and public health specialists. Furthermore, the video series can be exploited for other projects aiming to improve health promotion amongst Roma communities.



4.2 Pilot in Italy

1. Leading partner

National Institute of Health in Italy (ISS)

2. Objective and focus of pilot activity

The objective of the activity is to co-create and pilot a tool for engaging schools to raise awareness on vaccinations for personal and collective health and increase vaccine up-take.

3. Target group(s)

The school setting directly involves 3 main target groups, representing an ideal environment to study, analyse and tackle health inequalities under several perspectives. This pilot activity therefore addresses:

- Students (aged 10-19) attending junior and high schools, selected by the Lazio Region
- Students' families (parents)
- Teachers (some of them were directly involved with ISS in the design and implementation of the pilot activity)

Special attention will be given to underserved population groups within the school setting as emerging in the pilot activity.

4. Process of developing the pilot

The focus on the school setting was already defined before the National stakeholder roundtable. The roundtable brought together representatives from central institutions (e.g., Ministry of Health and Education), health professionals, as well as schools and citizens' associations.

After the roundtable and the appropriate evaluation of stakeholders' considerations, ISS involved the association of headmasters to further discuss and plan together the pilot activity to be started and implemented within the IMMUNION project. The exchange of ideas and perspectives between ISS researchers and the headmasters' association led to the decision of developing and implementing an ad hoc survey addressing the three target groups (students, teachers, parents) and a face-to-face meeting to discuss the survey results and provide information and educational material in an innovative setting (see the following section). The activity is planned to continue after the IMMUNION Project is concluded, with further activities in schools at national level, as further described in section 7.

5. Principal activities (achieved or planned)

The main activities of this pilot are:

- a. Online survey.** Following the engagement and agreement on actions to be co-developed with the school headmasters' association (September - October 2022), an online survey was designed and launched in November 2022, with a link available on the ISS website <https://www.iss.it/web/guest/immunion-il-progetto>. The survey involved 3 ad hoc questionnaires addressed to students, parents and teachers of sampled secondary schools in the Lazio Region.
- b. Face to face meeting at ISS.** Selected representatives of the three target groups (students, parents and teachers of sampled schools in the Lazio Region) will be invited for a visit of the ISS Museum on 12 December 2022, where they will be engaged in a lively discussion on health information literacy and on vaccine communication tools. In particular, ISS will show the teaching material included in the e-Bug programme <https://www.e-bug.eu/> operated by the UK Health Security Agency, and providing free resources to support children and young people to play their role in



infection prevention and control. This includes free educational resources for schools to introduce students to microbes, hygiene, vaccinations and antimicrobial resistance. ISS is a partner of the project and plans to launch it in Italian schools at national level. In this way, students, parents and teachers are solicited on reasoning about vaccines and vaccinations as relevant disease prevention and public health issue.

- c. **Evaluation of the overall results.** ISS will analyse the results of the pilot activity and discuss next steps, including the possibility of rolling out this type of engagement and awareness activity at national level together with the appropriate ministries.

6. Achieved or expected results

In terms of the survey results, ISS collected sample data on November 20 and will collect final data on November 30. To date, ISS has received 115 questionnaires from teachers (only 31 are complete); 43 from students (only 6 are complete); 106 from parents (only 30 are complete). Preliminary analysis of the results highlight a lack of awareness and literacy on vaccination.

ISS is confident that the next step in the pilot (face-to-face meeting, on 12 December) will have positive outcomes in terms of increasing awareness and knowledge about vaccines and vaccination. Other expected medium-term results will vary depending on the future exploitation of activities, as detailed below.

7. Future outlook: further exploitation after IMMUNION

In January – March 2023 the activities will continue with further engagement of national stakeholders to provide a contribution to vaccine awareness and vaccination uptake in school settings, with special attention to underserved populations, to provide a more equitable approach to health information in general and vaccine information in particular. ISS will continue interacting with schools and engage them in awareness campaigns on vaccine literacy and health literacy, and explore other possible activities.

For instance, during the IMMUNION Roundtable in June, stakeholders agreed that it could be useful to build up a digital library/repository of validated materials on vaccinations for teachers and students. Furthermore, specific training courses can address these issues, providing teachers with communication competences, which are fundamental in the promotion of vaccinations among school-aged children and their families. A wider national campaign may be developed on the bases of the engagement strategy developed within the project. A further exploitation of IMMUNION legacy can be within other national and international initiatives focused on the improvement of vaccine communication and the compliance of several target groups with vaccination uptake.

These activities, started within IMMUNION, will be funded with ISS budget devoted to scientific communication and also as appropriate through other EU funded projects (such as the new Joint Action on HPV, PERCH).



4.3 Pilot in Latvia

1. Leading partner

Centre for Disease Prevention and Control (CDPC)

2. Objective and focus of pilot activity

The objective of the pilot is to create and pilot a tool for raising HPV vaccine coverage in adolescents in Latvia. The HPV vaccine was chosen because of low vaccine coverage rates (in 2021, HPV vaccination coverage among girls was 62.5%) and the implementation of state funded HPV vaccination for boys starting from 2022.

3. Target group(s)

The target group are adolescents: girls aged 12–18 and boys aged 12–15 (to whom state-funded HPV vaccine is available), and the secondary target group are their parents (a person can decide medical questions about their health from the age of 14). The target group will be assessed through the National Healthy Schools Network. Since there are schools in the Healthy Schools Network that are located not only in the biggest cities of Latvia but also in quite rural areas, those schools will also be included in the pilot. In those areas, vaccine coverage rates are usually lower than in other parts of the country. Underserved populations will be somewhat included in the pilot.

4. Process of developing the pilot

From the outcomes of the National stakeholder roundtable, it was clear that in order to focus on adolescents, an interactive, modern and appealing tool is needed. All stakeholders agreed, including representatives from a group of health communication experts, academia, health care professionals and parents' organisation.

To develop the tool, CDPC will collaborate with a nongovernmental organisation based in the USA, "Advocates for Youth", which has developed several educational videos for adolescents, including a video about HPV vaccination on their platform "Amaze". CDPC will conclude an agreement with "Advocates for Youth" to translate and dub a video about HPV vaccination in Latvian. After dubbing the video it will be distributed and piloted in schools of the National Healthy Schools Network.

5. Principal activities (achieved or planned)

| | October | November | December | January | February | March |
|---|---------|----------|----------|---------|----------|-------|
| 1. Meeting with the collaborating organisations and agreeing on details | | | | | | |
| 2. Signing memorandum of collaboration | | | | | | |
| 3. Procurement for video translation and dubbing | | | | | | |
| 4. Video | | | | | | |

| | | | | | | |
|--|--|--|--|--|--|--|
| translation and dubbing | | | | | | |
| 5. Procurement for video piloting | | | | | | |
| 6. Video piloting and results from pilot | | | | | | |

6. Achieved or expected results

At least 400 adolescents of both sexes will be included in the pilot study. A knowledge assessment tool will be developed on one of the online platforms to assess the knowledge of the target audience on the issues contained in the video. Questions will include viewers’ awareness and knowledge about HPV vaccine and vaccination, attitude towards vaccination, etc. Piloting participants will fill out the knowledge assessment tool twice – once before and once after watching the video. After that, the results of both knowledge assessments will be summarised and compared.

Expected short term results: adolescents and parents who have seen the video have better knowledge about HPV and HPV vaccination and changed attitudes towards the HPV vaccine.

Expected medium term results: increase of HPV vaccine coverage for girls and boys in Latvia and reduced vaccine hesitancy.

7. Future outlook: further exploitation after IMMUNION

After piloting, the tool (the video) can be distributed to all schools in Latvia through teachers or e-learning programs that are used in all national schools. The video could be a part of a bigger campaign in the future as well. In addition, parents’ organisations will be able to use this video to inform parents, communication experts can implement the video in their health campaigns and academia representatives can distribute the video further to future clinicians and public health specialists.



4.4 Pilot in Romania

1. Leading partner

National Institute of Public Health (INSP), Romania

2. Objectives and focus of pilot activity

The COVID-19 pandemic had an influence on the coverage of routine childhood immunisations due to cancellations or postponement of immunisation appointments. To rehabilitate the immunisation coverage of routine vaccines, communication and community engagement tools are crucial.

The objectives of the pilot are:

- to improve access to and use of reliable and accurate information about vaccination to increase confidence and uptake in specific target populations;
- to improve parents' knowledge and to increase childhood vaccine(s) uptake, by co-creating/co-selecting and piloting new communication tools.

3. Target group(s)

Children are a vulnerable population because they lack the autonomy and decision-making capacity to ethically and legally consent to participate and to understand and assume the risks of vaccination, and because of inequalities of power between adults and children.

There are several psychological, social, and contextual factors that can affect the decision by a parent not to vaccinate their child: parental appraisal of the illness, parental knowledge, general attitude to vaccination, recommendation on vaccination, social influence, information about vaccines, perceived efficacy of vaccines, parental emotions, trust in government, and beliefs. In Romania, vaccination coverage is usually lower in vulnerable communities, such as those with low education.

With this in mind, the main target group of the pilot are parents. This target group will be further included in the Health Promotion and Evaluation National Program (more details on this are provided in section 7 on future outlook).

4. Process of developing the pilot

Based on the discussion around the current regulations and routine health promotion activities in Romania, several pilot activities were envisaged:

- 1) To co-create new validated tools as a pilot initiative within the IMMUNION period, namely new tools on Hepatitis, in the framework of the Health Promotion and Evaluation National Program, linked with World Hepatitis Day (28th July 2022) and National Awareness Month about Communicable Diseases (HIV/AIDS, Tuberculosis, Hepatitis, December 2022). The tools would aim to support parents to adopt a favourable attitude towards vaccination and to improve vaccine uptake.
- 2) To make better use of existing tools, such as the national vaccination schedule for children, which will be improved and updated by end March 2023, in the framework of the Health Promotion and Evaluation National Program. This could be linked with the National Vaccination Information Month and the European Immunization Week in April 2023.

Ultimately, INSP decided to co-create two new tools as pilot initiatives: a Press Release and a poster regarding newborn vaccination against Hepatitis B. INSP has published both tools on its institutional website. Both have also been shared on the IMMUNION online toolbox.

The tools/piloting actions were based on cooperation between central and local Romanian public entities: the Ministry of Health, county public health authorities and National Institute of Public Health, academia, healthcare and communication professionals, but also several representatives of the civil society.

5. Principal activities (achieved or planned):

| No | Activities 2022 | Achieved | Planned |
|-----|---|----------|---------|
| 1. | National Stakeholder Roundtable, 28 June 2022 | ✓ | - |
| 2. | Co-create and co-select 2 new tools: World Hepatitis Day Press release and Hepatitis B vaccination Poster, July 2022 | ✓ | - |
| 3. | World Hepatitis Day national campaign https://insp.gov.ro/2022/07/28/28-iulie-ziua-mondiala-a-hepatitei/ | ✓ | - |
| 4. | IMMUNION WP6 meeting, 20 September 2022 | ✓ | - |
| 5. | The new tools were added on IMMUNION website https://coalitionforvaccination.com/toolbox | ✓ | - |
| 6. | Preparing the pilot study design, sample and possible post-pilot questions, October 2022 | ✓ | |
| 7. | Decision to include the pilot study in the broader framework of the Health Promotion and Evaluation National Program – National Information Month about Communicable Diseases (HIV/AIDS, Tuberculosis, Hepatitis), December 2022. | ✓ | - |
| 8. | Creating the post-pilot KAP (Knowledge, Attitude and Practices) questionnaire in <i>Google forms</i> , October-November 2022 | ✓ | - |
| 9. | Pilot study: Improved awareness of parents as regards childhood vaccination to increase vaccine up-take | ✓ | - |
| 10. | Disseminating the questionnaire and collecting the feedback from the target group (parents) 07-11 November 2022 | ✓ | - |
| 11. | The first version of WP6 – Milestone 6.3. country report, 14 November 2022 | ✓ | - |

6. Achieved or expected results

Expected short term results: National campaign specifically targeting vulnerable populations (children) to boost their vaccination coverage and improve overall equity in vaccination; their parents, who have seen the tools, have better knowledge about Hepatitis B childhood vaccination and changed attitudes towards the HBP vaccine.

Expected medium term results: improved childhood vaccination coverage in Romania, reduced vaccine hesitancy.

As the pilot has already taken place in Romania, INSP has already carried out the post-pilot survey. 1252 people responded to the survey. The details of their input are included below:

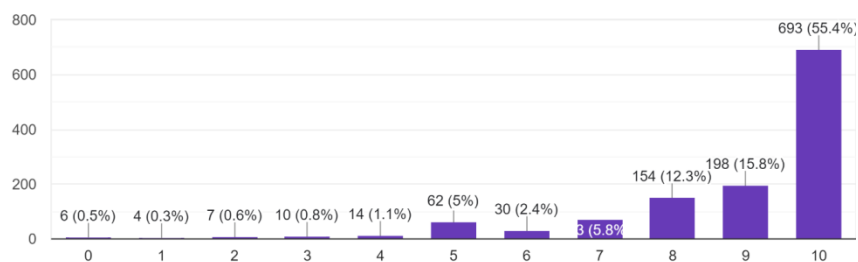
Questions answered after the pilot activities:

- **Question no.1:** How useful do you find the communication toolkit about HPB vaccination for parents (at the following link: <https://insp.gov.ro/2022/07/28/28-iulie-ziua-mondiala-a-hepatitei/>)
Scale from 0 (useless) to 10 (most useful)
- **Question no.2:** In case you found useful the communication kit for parents, what do you think is the most important outcome of a Vaccination advocacy campaign?
Information Awareness Education Communication Health of our children

Results:

- Question no.1

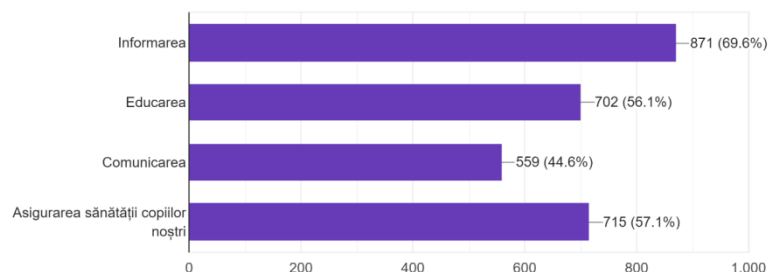
9. Cât de util considerați ca este setul de instrumente de comunicare pentru părinți de la urmatorul link: <https://insp.gov.ro/2022/07/28/28-iulie-ziua-m...epatitei/> Scala de la 0 (inutil) la 10 (cel mai util)
1,252 responses



The majority of respondents (96.8%) rated the communication tools for parents from sufficiently useful (5 and 6 on the rating scale) – to useful (7 and 8 on the rating scale) – up to very useful (rating 9 on the scale) and the most useful (rating 10 on the scale). The remaining 41 (3.2%) respondents rated useless (from 0 to 4 on the rating scale) the selected communication tools.

- Question no.2:

10. Dacă ați considerat util setul de comunicare despre prevenirea hepatitei (de mai sus) pentru părinți, care credeți ca este cel mai important rezultat al unei campanii de promovare?
1,252 responses



- 69.6% (871) selected the answer: Information;
- 56.1% (702) selected the answer: Education;
- 44.6% (559) selected the answer: Communication;
- 57.1% (715) selected the answer: Ensuring the health of our children.



Nota bene: this question was answered by all study participants, including those who rated useless the selected communication set.

Conclusion of questionnaire:

All 1252 participants (parents) in the pilot study had the opportunity to become aware of the benefits of vaccination. The results obtained showed that 96.8% of the participants improved their knowledge and attitude towards vaccination, a prerequisite to increase the uptake of hepatitis B vaccine and to ensure a good start in life for their children.

7. Future outlook: further exploitation after IMMUNION

After piloting, the campaign tools were distributed to general active population (parents) in Romania through a national IEC (Information, Education, Communication) campaign. The tools will also be a part of the Romanian National awareness Month campaign about Communicable Diseases (HIV/AIDS, Tuberculosis, Hepatitis), in December 2022. This will take place according to the “Methodology for designing, monitoring, evaluating and reporting the implementation of IEC campaigns with themes established on the basis of public health priorities” More information can be found here: <https://insp.gov.ro/download/metodologie-campanii-iec-2022-pdf/>



5 Final considerations

The IMMUNION activities of co-creating new or co-selecting existing tools for piloting are designed to recognise and combat vaccine hesitancy in the general population as well as in population subgroups, and to improve communication/community engagement in target communities and increase vaccine uptake.

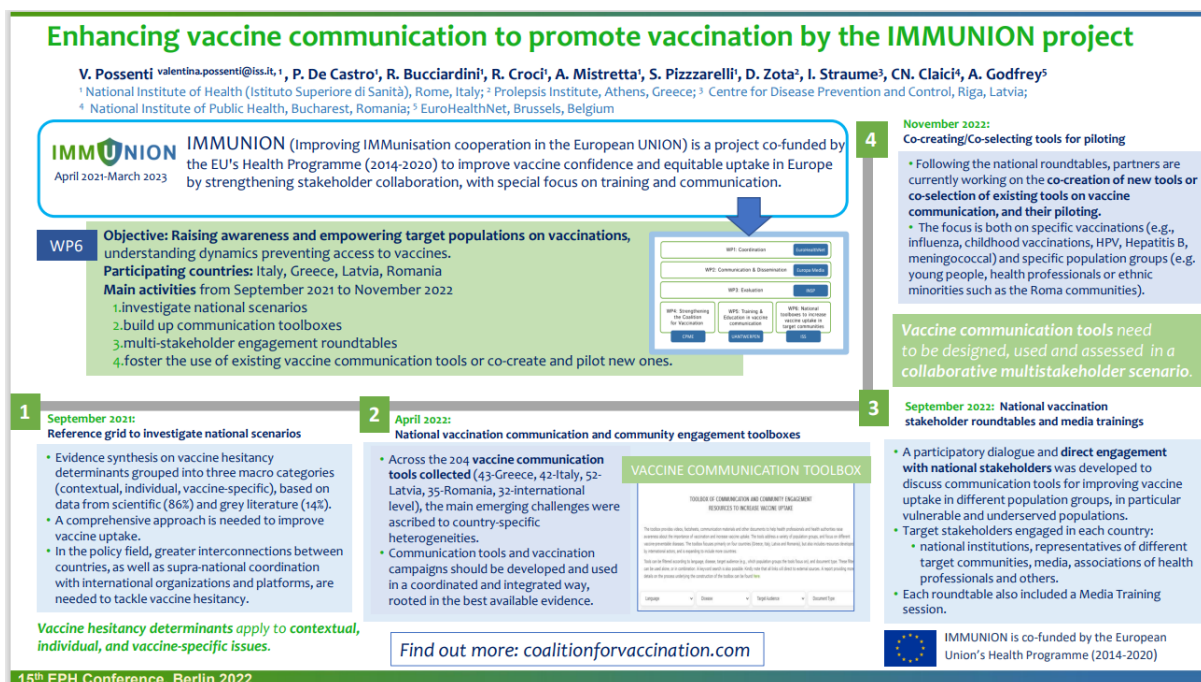
The four partner countries focus on particular vaccinations (e.g., HPV, Hepatitis B) and specific population groups (such as young people or Roma communities).

This milestone is the final formal step in the WP6 activities, and links up with activities across other IMMUNION WPs (in particular WP5, WP4 and WP2), helping to achieve progress in the national contexts in matters of vaccine awareness by engaging with key stakeholders.

This milestone is also the first step towards continuity and sustainability of activities started within WP6, that will be carried on in the coming year, after the end of the project itself.

As shown at the Figure 1, all WP6 activities were presented at the European Public Health Conference (EPHC - Berlin, 9-12 November 2022) by WP6 lead ISS. Vaccine-related issues were highly covered at the EPHC, both in general as well as in relation to particular hard-to-reach populations.

Figure 1. Communication on IMMUNION WP6 activities presented at the European Public Health Conference (Berlin, 9-12 November 2022).



6 Annexes

Annex 1: Template to plan actions

Template to be used to compile Milestone 6.3 “Co-creating/co-selecting tools for piloting”
Maximum 2 pages

1. Leading partner

Name of partner

2. Objective and focus of pilot activity

(Describe the overall objective of the activity, including if appropriate which vaccine you are focusing on)

3. Target group(s)

(Describe the final target/s and motivation for selecting this target group, including if possible to what extent a focus on underserved populations has been developed, i.e. in a scale from zero/not at all/ to very strongly)

4. Process of developing the pilot

(Indicate how the pilot was (co)-created, which stakeholders were engaged, etc. – leaning on the work of the stakeholder roundtables as appropriate)

5. Principal activities (achieved or planned)

(Provide an overview of the activity/activities) you intend to carry out within the scope of the pilot (e.g., developing a video, carrying out a campaign, etc.), specifying the dates, location, duration, etc. Describe progress of activity to date (November 2022) and in the coming months within the IMMUNION project

6. Achieved or expected results

(Indicate short/medium term results)

7. Future outlook: further exploitation after IMMUNION

(Where applicable, indicate actions to exploit further the task delivery beyond the IMMUNION milestone itself (as well as which other stakeholders may be engaged in further exploitation)

Potential questions to be answered soon after the pilot activities

Included below are some of the key questions the post-pilot surveys should try to assess. Each country should feel free to tailor these questions to their contexts and add further context-specific questions. Overall, we are trying to measure:

- Awareness and knowledge about vaccines and vaccinations (e.g., benefits, services available, side-effects, etc.)
- Attitudes towards vaccines and vaccinations (e.g., reduced vaccine hesitancy)
- Identification of structural or contextual barriers to vaccines and vaccinations
- Critical factors to vaccine communications (in terms of available tools or relating to difficulties in engaging with relevant stakeholders in the field)

Annex 2. WP6 Targets and indicators related to Task 6.4

| Output Indicator(s) | Target value |
|---|--|
| Number of campaigns specifically targeting vulnerable and underserved populations to boost their vaccination coverage and improve overall equity in vaccination | At least 2 communication/community engagement campaigns initiated in 2 countries |

| Outcome/Impact Indicator(s) | Target value |
|--|--|
| Improved knowledge/awareness of target groups as regards vaccination (benefits, services available, side-effects, etc.) to increase vaccine up-take. | At least 95% of the participants in the pilot study improve their knowledge (pre- and post-test) |
| Piloted communication tools result in increased awareness of the benefits of vaccination in targeted communities | Pre-/post-questionnaires or focus groups indicate an increase of awareness of at least 10% |

