To tackle health system barriers hindering the uptake of human papillomavirus (HPV) and measles, mumps, rubella (MMR) vaccines among Ukrainian migrants in Poland, our project draws upon insights from various stakeholders, including Polish health professionals, researchers, and members of the Ukrainian community. Through this collaboration, we have identified two key barriers: inadequate information delivery and lack of awareness-raising initiatives. While language barriers were recognised as significant, they were deemed less feasible to address in the RIVER-EU project. On the other hand, health professional training was deemed feasible but less significant as a barrier. Guided by these findings, our pilot interventions are designed to directly confront these identified health system barriers to vaccine uptake among Ukrainian migrants in Poland.

The pilot interventions consist of three main components:

1. **Health professionals undergo specialised training** that equips them with the knowledge and skills necessary to conduct educational sessions for parents.

2. **Trained health professionals** then lead educational meetings for parents, providing them with essential information about HPV and MMR vaccines. Online materials are disseminated through school platforms to supplement the educational meetings.

3. **This process is complemented by navigators who actively engage with parents**, sending vaccine reminders and helping in finding their way around the vaccination system. Together, these efforts aim to enhance vaccine uptake among Ukrainian migrants in Poland.
Training

Based on our evidence collection, Ukrainian migrants expressed mistrust towards individuals lacking a medical background when it comes to vaccination advice. Therefore, actors engaged in this intervention must have both a medical background and Ukrainian origin. They play diverse roles within the Polish healthcare system, including general practitioners, gynaecologists, medical students, vaccination point nurses, midwives, and healthcare coordinators. These health professionals will receive comprehensive online training designed to deepen their understanding of HPV and MMR-related diseases, vaccination pros and cons as well as its protocols, and the organisation of vaccination programmes in Poland. Emphasis is placed on developing effective communication and presentation skills to convey information in simple, culturally appropriate language. This training also addresses contextual characteristics, including specific barriers faced by Ukrainian migrants and their common beliefs.

Education

Defining target groups

Once health professionals complete their training, they will engage with specific target groups. These groups consist of parents or legal guardians of vaccine-eligible children aged 12 to 17 with Ukrainian migration backgrounds, including both registered refugees, and legal migrants. This focus on the specified age group aligns with the project's aim to promote HPV vaccinations that are accessible and free of charge.

Educational content and settings

The interventions will be implemented in three major cities in Poland with a significant number of Ukrainian migrants, taking into account potential regional differences: Rzeszów and Lublin in the southeast and Zielona Gora in the west. There, trained health professionals will host meetings with parents to deliver culturally adapted knowledge on HPV and MMR vaccina-
These sessions aim to address common beliefs, offering an opportunity to correct any misinformation. Additionally, parents will be equipped with communication skills to discuss vaccination with their children. These meetings will take place in conference rooms at family medicine practices. Furthermore, online educational materials will be distributed via existing school platforms that parents and teachers use to communicate with each other. They will be presented in simplified language and available in Ukrainian.

These sessions aim to address common beliefs, offering an opportunity to correct any misinformation.

Navigation

On top of this, our intervention will benefit from navigators. They are executive managers from medical centres, including the Medical Training Centre for Foreigners, individuals with master’s degrees in physiotherapy, and PhD students who are fluent in Ukrainian language. They will actively reach out to parents of vaccine eligible children with a Ukrainian migration background. These children are registered at family medicine clinics and eligible for 100% reimbursement but have not yet received vaccination. Through phone calls and text messages, these navigators send reminders and offer assistance in navigating the national vaccination system.

Quality assurance

Health workers’ training will be assessed based on their knowledge, attitudes, and practical skills before and after courses. Continuous feedback will be sought throughout the process to facilitate ongoing improvements.

For parents, knowledge and intention towards vaccination will be measured using pre- and post-questionnaires. Additionally, the vaccination status of participants' children will be checked after three months. In cases where vaccination has not occurred, direct calls will be made to inquire about vaccination intentions.