

Evaluation of the
WHO Regional Office for Europe
Tailoring Immunization Programmes (TIP)
behavioural insights tool and approach

Final report



Keywords

BEHAVIOUR CHANGE

VACCINE HESITANCY

IMMUNIZATION

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Executive summary

In 2013 the WHO Regional Office for Europe developed the *Guide to tailoring immunization programmes (TIP)*, offering countries a process through which to diagnose barriers and motivators to vaccination in susceptible groups and design tailored interventions. To take stock of TIP implementation so far, an external committee of six leading global experts conducted an evaluation in June to December 2016, informed by country assessments, a review of national and regional documents and an online regional survey.

The evaluation committee concluded that national immunization managers in the Region were generally aware that TIP exists (although its focus and intentions were not well understood by all), and that there was strong demand for the type of research it addresses. A number of countries were planning TIP activities in the short or long term and requesting WHO support and guidance.

It was clear that the TIP process has a number of important strengths and has had a programmatic impact in all the countries where it has been applied. The evaluation found the most commonly cited strengths of the TIP approach to be community engagement and qualitative research, enhancing the ability of programmes to “listen” and learn, to gain an understanding of community and individual perspectives. Other strengths cited were its ability to facilitate the questioning of assumptions, generate localized insights and identify interventions responsive to the insights and relationships established through the approach. The interdisciplinary stakeholder engagement, the insights gained and the relationships generated merely by assembling a diverse group of stakeholders added value in themselves.

Similarly, the initial step of collectively agreeing on the susceptible groups was cited as a valuable accomplishment in its own right. In this way, TIP seems to be particularly relevant for approaching groups with common environmental, social or behavioural characteristics. The emphasis on considering changes to service delivery rather than focusing solely on communication was another highlighted strength of the approach. Some countries that have implemented the TIP approach have evaluated the results and found that the interventions were seen as positive. One country has been able to show an increase in vaccination uptake (Lithuania); the others have not yet measured the bottom-line health impact of their TIP-related interventions.

WHO engagement and support were highly appreciated by country implementers, but these entail the risk of dependence and reduced local ownership and leadership. A critical aspect of TIP implementation is the fact that changing service delivery is a long, slow and often complicated process. Emphasizing that the purpose of TIP should go beyond identification of susceptible groups and diagnosis of challenges to the development of appropriate and effective interventions, the evaluation committee recommends that WHO should place emphasis on helping countries translate diagnostics into interventions and start the necessary process of overall change. The implementation of interventions should be supported by an emphasis on

enhanced local ownership; integrated diagnostic and intervention design; and follow-up meetings, advocacy and potentially incentives like seed funding for intervention and evaluation activities.

The time requirements and investment of human and financial resources documented in the evaluated countries are other aspects that need to be addressed. Suggestions for this included shortening the diagnostic exercise and developing a basic needs assessment tool for countries to complete as a first TIP step.

The committee recommends that future TIP materials should be more user-friendly, shorter and simpler than the current guide, drawing on user feedback and user-centred design research. The stepwise structure and WHO branding should be retained, along with the illustrations and figures that have supported national planning. It also recommends that WHO should continue to offer training workshops and take additional steps to establish a community of practice with TIP-implementing countries.

1. Background

Suboptimal vaccination coverage leads to continuous outbreaks of preventable diseases. It threatens to jeopardize progress towards disease elimination and to allow diseases such as diphtheria and pertussis to re-emerge in the WHO European Region. The European Vaccine Action Plan 2015–2020 (EVAP) identifies tailored, innovative strategies as critical in reaching population groups with suboptimal vaccination coverage.¹

Prompted by the European Technical Advisory Group of Experts on Immunization (ETAGE), in 2013 the WHO Regional Office for Europe developed the *Guide to tailoring immunization programmes (TIP)*.² Drawing on social sciences, ethnographic research techniques and behavioural insights methodology, TIP offers Member States a process through which to identify susceptible groups; diagnose health-seeking behaviour barriers and motivators; and segment populations according to behavioural determinants, in order to design tailored interventions.

The intention was to introduce a game-changer for immunization programmes in the sense that – in a traditionally supply-oriented culture – it introduced a people-centred approach,³ with the use of enquiry and investigation with beneficiaries. TIP was subsequently piloted and implemented in four countries in the Region, and was also adapted for seasonal influenza (TIP FLU) and antimicrobial resistance programmes (TAP), with an additional four pilot projects in Member States.

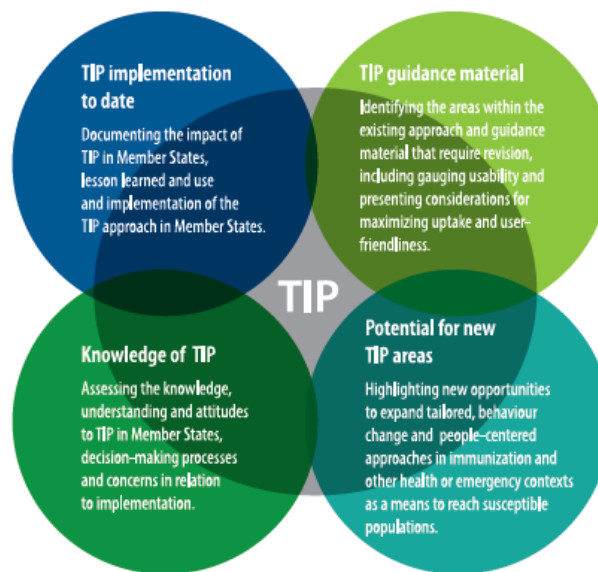
In 2014 the Strategic Advisory Group of Experts (SAGE) Working Group on Vaccine Hesitancy identified tailored strategies as critical to address vaccine hesitancy. It prompted the Regional Office to ask a team of external experts to evaluate the TIP approach in June 2016 by exploring its health impact, taking stock of its use and implementation in Member States and providing recommendations for the next phase of this work. The core areas of the evaluation were defined as shown in Fig. 1.

¹ WHO Regional Office for Europe (2014). European Vaccine Action Plan 2015–2020 (EVAP). Copenhagen: WHO Regional Office for Europe (<http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2014/european-vaccine-action-plan-20152020-2014>, accessed 24 January 2017): EVAP objective 3.

² <http://www.euro.who.int/en/health-topics/communicable-diseases/poliomyelitis/publications/2013/guide-to-tailoring-immunization-programmes>, accessed 24 January 2017

³ **People-centred** approaches constitute a key element in Health 2020, WHO's European health policy framework. In immunization, the term often used is **demand-related**, but **people-centred** is more in line with the intentions of the TIP approach.

Fig. 1. Core areas of TIP evaluation



2. Evaluation process

The evaluation was conducted during June to December 2016 by an external evaluation committee. This comprised a group of leading global experts in social science research into immunization, vaccine hesitancy, immunization communication and immunization programme delivery. The committee members were:

- Victor Balaban, Behavioural Scientist, Office of Overseas Operations, Center for Global Health, United States Centers for Disease Control and Prevention;
- Eve Dubé, Anthropologist, Researcher at the Research Center of the Centre hospitalier universitaire de Québec and Adjoint Professor, Université Laval;
- Benjamin Hickler, Medical Anthropologist, Communication for Development Specialist – Health Section, United Nations Children’s Fund Programme Division;
- Everold Hosein, Communication Advisor/Consultant, Adjunct Professor, New York University;
- Julie Leask, Behavioural Scientist, Associate Professor, University of Sydney, School of Public Health;
- Brent Wolff, Team Lead for Demand, Policy and Communication Team, Global Immunization Division, United States Centers for Disease Control and Prevention.

The evaluation process was coordinated by the WHO Regional Office for Europe.

Evaluation activities included the following:

- regular **evaluation committee telephone meetings**, with discussions on the evaluation framework and focus, evaluation activities and preliminary outcome of evaluation activities;
- **evaluation assessment visits** to four Member States that had conducted TIP or TIP FLU projects:⁴ Bulgaria, Lithuania, Sweden and the United Kingdom of Great Britain and Northern Ireland (undertaken during September to November 2016), resulting in conclusions and recommendations on the respective

⁴ Three countries had finalized TIP projects and were reviewed (Bulgaria, Sweden, United Kingdom). Two TIP projects were ongoing and therefore not included in the evaluation (Germany, Kazakhstan). One TIP FLU project was included to ensure a broader scope (Lithuania). Two TAP projects were included to ensure a broader scope (Sweden, United Kingdom) – these were ongoing and therefore not evaluated, only briefly consulted during visits to the two countries.

national TIP processes and implementation,⁵ and in recommendations for the regional TIP evaluation report;

- **briefing meetings** with national coordinators for the TAP projects in Sweden and the United Kingdom;
- detailed **reviews of national TIP documents** during each country visit, of the 2013 *Guide to tailoring immunization programmes (TIP)* and of other documents relevant to this;
- an **online survey** of the 46 Member States in the WHO European Region that had not conducted a TIP project;
- an evaluation **committee workshop** on 16–18 November 2016 to discuss and agree on conclusions and recommendations.⁶

3. Evaluation findings

3.1 General awareness and understanding of TIP in the Region

The evaluation involved a web-based survey to assess and explore national immunization managers' views on the issues and challenges TIP seeks to address, as well as their specific knowledge and perceptions of TIP. Participants included national immunization managers in 46 countries in the WHO European Region that, at the time of the evaluation, had not yet embarked on a TIP project.⁷ Forty responses were received, of which 16 were anonymous. Of the 24 non-anonymous responses, two were from the same country, so it can be assumed that up to 39 Member States (85%) responded. The non-anonymous responses reflected the diversity of the Region (for example, in terms of language, culture and health systems), coming from countries in central Asia, the Caucasus and the Balkans, as well as central, western and eastern Europe. After four responses containing answers to only two questions were excluded, 36 questionnaires were analysed (detailed methods and results are available in Annex 1).

In summary, the survey findings indicated strong demand for the type of research TIP addresses and strong awareness of the existence of the TIP guide. The response rate was 85% – considerably higher than the usual rate of around 35% for such surveys, and thus an indication of interest among Member States. Many respondents agreed that their country needed to “conduct research to obtain a detailed understanding of the factors that influence vaccination intentions, decisions and behaviours in undervaccinated groups”, indicating an acknowledgement of the need to explore and better understand these issues.

Interestingly, some survey responses introduced new national TIP projects to WHO for the first time, underlining that the TIP tool and approach has become known in the Region to the extent that TIP projects are now initiated with no prompting from WHO.

Some of the responses, however, indicated that while the TIP name is well known, its focus and process are not well understood by all. For instance, only 15 of the 36 respondents agreed with the statement “I know which issues the TIP tool is intended to help address”, and 11 respondents skipped this question.

The motivation for national efforts in this area is evident: more than half of the respondents indicated an

⁵ Individual country evaluation reports are attached to this publication as annexes.

⁶ The evaluation committee workshop was attended by Victor Balaban, Eve Dubé, Benjamin Hickler, Julie Leask and Brent Wolff. Lisa Menning, WHO headquarters, and Katrine Bach Habersaat, WHO Regional Office for Europe, participated as observers.

⁷ Countries with ongoing or finalized TIP projects included Bulgaria, Germany, Kazakhstan, Lithuania, Montenegro, Sweden and the United Kingdom.

intention to implement a TIP project in their country in the future, including some within 1–2 years. The need for guidance and tools in this area is also clear, as many countries requested TIP guidance and WHO support and considered TIP to be a useful tool to address critical challenges in their national immunization programmes.

Finally, more than half of the respondents did not feel certain that they had the necessary funding, and more than half did not feel certain that they would be able to allocate the necessary human resources to conduct a TIP project. These are important obstacles that need to be taken into account in future TIP work in the Region.

3.2 National application of TIP in the reviewed countries

3.2.1 Summary of activities

Table 1 briefly summarizes the TIP projects that were evaluated. See Annexes 2–5 for more detail.

Table 1. Results of TIP project evaluation

Category	Bulgaria	Lithuania	Sweden	United Kingdom
Year initiated	2012	2014	2013	2014
Background	Suboptimal childhood vaccination coverage, especially among vulnerable (mainly Roma) populations causing large measles outbreak in 2009–2011	Very low uptake of seasonal influenza (flu) vaccination among pregnant women	Suboptimal childhood vaccination coverage among three communities: anthroposophic community; Somali migrants; undocumented migrants	Suboptimal childhood vaccination coverage among an ultraorthodox Charedi Jewish community in north London resulting in recurrent outbreaks of vaccine-preventable diseases
Project instigators	TIP pilot project initiated by WHO as part of the development of the TIP guide	TIP pilot project led by WHO as part of the development of a new TIP FLU guide for pregnant women	Driven by national public health agency's immunization programme team, with considerable process support from WHO	Driven by national interdisciplinary project team with modest WHO engagement and support
Project elements	Workshop with key stakeholders resulting in situation analysis (strengths, weaknesses, opportunities and threats: SWOT) Research agency conducting extensive qualitative and quantitative research Workshop with key stakeholders to discuss findings and recommendations and define interventions	Situation analysis based on stakeholder consultation Qualitative research with pregnant women and health workers Parallel process of formative research and intervention development Development, testing and use of communication materials and training of health workers	Situation analysis and formative research (workshops, review of coverage data, reference groups, stakeholder meetings, in-depth interviews) conducted in the three communities (four core staff including master thesis projects) Intervention design and early implementation and evaluation planning in one community (Somali)	Situation analysis based on workshops with engagement of multiple stakeholders, literature review and outbreak and surveillance data analysis Focus on community engagement Quantitative and qualitative research through surveys and in-depth interviews with community representatives and key informants
Results	Recommendations for interventions made, but to date not implemented owing to limited staff and resources Process considered very valuable for the immunization programme in obtaining new information about critical target groups TIP guide published, including	Communication interventions implemented, evaluated/refined and extended to broader areas Flu vaccination included as standard question on pregnancy card and included in new guidelines for antenatal care	Decision to intervene in the Somali community initially: lectures, video, peer-to-peer, training communication skills of nurses and others Possible interventions in the other two communities, but awaiting outcome of the Somali community interventions before implementation	National TIP report (launched December 2016) with recommendations for tailoring vaccination services to be used for advocacy Initial interventions among those recommended being initiated. Negotiations between commissioning and service provision partners initiated.

Category	Bulgaria	Lithuania	Sweden	United Kingdom
	case examples from Bulgaria			
Evaluation of impact	No evaluation conducted	Materials tested with the target group twice, which guided messages and visual identity Evaluation conducted based on data from questionnaire survey analysis of vaccine coverage data Flu vaccination coverage in the district increased to 107 pregnant women in 2015–16, compared to only six in the season before	Plan to evaluate impact in 2017 Plan for ongoing surveys of attitudes and demographics associated with undervaccinated groups to signal future areas of focus	Monitoring and evaluation of interventions included in the list of recommendations in the report
Examples of insights gained	Many doctors – themselves not from vulnerable communities – perceived that vulnerable communities had a low health culture, leading to mistrust and false assumptions regarding their information needs. In response, the Roma health mediator programme offered a tangible and positive way to support vaccination services by providing vaccination communications and counselling. Other solutions are continuous education and job aids for doctors.	It was clear that flu vaccination had not been integrated into health workers’ routines with pregnant women, and that they generally did not support it. This suggested that information and training was needed, as well as a routine “tick box” question on flu vaccination on the standard pregnancy card, urging all health workers to recommend flu vaccination to pregnant mothers.	The Somali parents were worried about the incidence of autism in their community. Health workers were hesitant to mention autism in relation to vaccination, causing them to not meet this specific information need of parents. Seminars were held to address vaccination and to help parents understand early signs of autism, enabling them to be reassured when children are displaying normal behaviours misjudged as signs of autism. The seminars both address a need in the community and strengthen the capacity of nurses to discuss autism.	There was no (religious or other) resistance to vaccination in the community, but also no community support for vaccination. In an extremely adherent community, social norms are critical. In response, efforts were made to strengthen immunization as a social norm. Convenience, such as opening hours and child-friendly facilities – for the families who often have many children – were other key issues.

3.2.2 Summary of common findings across countries

Countries varied significantly in how they undertook and experienced the TIP process. This suggests that TIP is a structured but flexible approach. Nevertheless, certain strengths and challenges were identified that cut across the country contexts covered in the evaluation.

A common theme was the critical importance of TIP leadership. In countries that relied heavily on WHO engagement and technical assistance there was a risk of reduced ownership and leadership of the process. Without a local sense of ownership and a focal person or team to bring stakeholders through the TIP process, the follow-through and sustainability of recommended interventions was often dependent on the continued involvement of WHO.

Another recurring topic was the value in both the insights gained and the relationships generated through the TIP process, even where there were not (yet) clear, tangible, planned interventions that directly resulted from the process. Many participants reported the value of specific aspects of the process and indirect outcomes, including:

- the insights gained and relationships established merely through assembling a diverse group of stakeholders for a common discussion – as one participant remarked: “This is where the magic happens”;

- general agreement among a range of internal and external stakeholders that a challenge exists which needs to be addressed, as well as the means to address this;
- increased clarity about relevant characteristics and points of view of susceptible populations;
- realization of the programme’s value in adopting a participatory approach and listening to the points of view of communities;
- questioning (previous) assumptions based on insights and dialogue;
- opening lines of communication that did not previously exist;
- receptiveness to considering changing aspects of service delivery, not only focusing on communication.

The consultative and inclusive process required of TIP was recognized as critical, but participants emphasized their surprise at the time requirements and work involved.

The qualitative and people-centred approaches offered by TIP were new in most national contexts covered by the evaluation, and the TIP process seems to have created a level of enthusiasm for these, indicating an indirect value of TIP, especially in cultural settings where such approaches are still novel.

WHO engagement was generally highly valued and appreciated, and the WHO “stamp” was seen as a mark of quality and an important aspect in the decision to use the tool. The TIP guide was described as overly long and parts of it as unwieldy, however, although some of the more simple and summative sections were commonly described as very useful (such as Figures 4 and 9: the stepwise process description and the conceptual map).

A further common motif was TIP’s focus on community engagement, making it best suited for addressing chronic undervaccination among specific susceptible groups – especially those with leadership structures and common characteristics. These characteristics enhance the possibility of outreach and tailoring of service delivery to be more compatible with the needs of communities. Examples include the Charedi community in London, Roma communities in Bulgaria and Somali communities in Sweden. TIP applications there seem to have been productive at yielding socially acceptable and appropriate intervention ideas. However, experience in reviewed countries shows that the TIP method can also be applied more broadly to self-identified groups, such as pregnant women in Lithuania. While such groups may not have an identifiable leadership that can be engaged in the TIP process, they may still provide insights into behavioural norms or common beliefs that can be used to tailor immunization practice. The potential value of profiling and segmenting into target groups is highlighted as an opportunity here.

Based on the example from Lithuania the evaluation committee also discussed, and remained an open question, whether TIP is suitable for new vaccine introductions or other situations where vaccination coverage is so low that any interventions to enhance access to vaccination services or increase community demand (such as “non-tailored” information or communication interventions) may yield increasing coverage. For instance, target group research and testing of materials may be sufficient – and conducting a complete TIP with substantial community engagement may not be cost-effective.

A final theme across contexts was the difficulty of linking the formative research or diagnostic phase to the subsequent steps of implementation, adjustment and evaluation – i.e. starting a process of change in service delivery. For the formative phase, the current version of the TIP guide was recognized as strong for segmenting susceptible populations and diagnosing barriers and enablers to uptake. However, for the next steps of translating recommendations into discrete interventions and changing service delivery culture, countries indicated that the current TIP guide alone was often not sufficient.

4. Recommendations

4.1 Knowledge of TIP

Although there is a good awareness of the existence of TIP in countries in the WHO European Region, the evaluation committee recommends that the Regional Office should undertake activities to ensure a proper understanding of the TIP process and implementation.

4.1.1 Recommendations for enhanced understanding of TIP

Since the evaluation showed that not all national immunization managers fully understand the focus and intentions of TIP, WHO should refine and develop activities and strategies that raise awareness and enhance understanding of TIP at the national level through:

- presentations at relevant meetings;
- activities to raise awareness among immediate counterparts, such as EPI manager meetings;
- ensuring that any publication of a TIP project has clear reference to the TIP approach;
- more workshops on the TIP approach, either regionally or in-country.

4.1.2 Recommendations for WHO support to countries

WHO engagement and technical support is highly valued and is sometimes a requirement for a TIP project to take place. However, it entails the risk of reduced national leadership (see also section 4.3.4). Hence, the evaluation committee recommends that WHO should focus engagement in national TIP projects on the following areas.

WHO should continue to support TIP processes in countries through:

- technical support in initiation;
- skilled facilitation of the TIP process;
- TIP documents and tools.

WHO should facilitate TIP capacity-building through training workshops.

WHO should facilitate experience-sharing between countries (which will also allow WHO to learn from users) through a community of practice established to ensure exchange of lessons learned and insights gained between TIP-implementing countries. This might include a yearly peer network workshop to discuss:

- country experiences and lessons learned with TIP;
- facilitation;
- quality assurance;
- insights from users to enable WHO to improve the tools and help people apply the approach;
- user feedback and iterative modification.

4.2 TIP guidance material

The TIP guide posed a dilemma for the evaluation committee. Visually striking, it appeared successful in giving confidence to programme managers to embark on a qualitative study they might never have attempted without WHO's imprimatur. At the same time, it was universally acknowledged to be long and complicated in parts. Few (if any) of those interviewed had actually read through the TIP guide from cover to

cover. The evaluation committee recommends that a revised manual should:

- be significantly shortened and simplified;
- retain structured step-by-step guidance;
- retain the strong WHO branding;
- be printable (with a shorter and less toner-intensive design);
- draw on the expertise of design researchers to incorporate user insights in the design process;
- include supporting resources;
- include observation methods in the existing roster of survey, focus group and key informant interviews;
- include more focus on translating diagnosis into implementation.

In addition, the following supporting materials are recommended:

- a brief central document with the addition of supporting materials as appendices or in a web-based repository (see above);
- stories demonstrating the use of TIP in documents and presentations, including accounts of lessons learned and successes;
- digital communication tools for enhanced access to TIP, such as online videos or infographics;
- features of the central document and supporting materials, tailored to key audiences such as decision-makers, programme managers and researchers, to include a simple description of the TIP process with a flow diagram and an appendix with the theoretical background to ensure that the rigour of the method and tools is available for those who need it;
- TIP summaries of national projects to be used for regional and national advocacy;
- a repository of national documents used for the TIP process, including “best practice” options;
- a checklist for a basic needs assessment in countries prior to a TIP project.

4.3 TIP implementation

TIP has several core components that distinguish it from other assessment techniques. The evaluation results indicate that these can add value to national immunization programmes. They are described in more detail below, with the evaluation committee’s recommendations on how they might be enhanced in the next phase of TIP.

4.3.1 Identifying susceptible groups

TIP begins with identification of **clearly defined population groups** whose lack of full participation in immunization programmes could have an impact on public health. This seems to be a strength, in that it enables a specific, tailored approach to group(s) where reasons for undervaccination are complex and require further insight to inform solutions.

4.3.2 Community engagement

Unlike many programme assessments, TIP is designed to be **inclusive, participatory and sustained**. Community engagement lies at the heart of the TIP strategy to identify and overcome barriers to immunization. Engagement begins by including members of underserved population groups among active stakeholders who will define barriers to immunization and design solutions to overcome them. The emphasis is on social science research methods, involving open-ended probing questions and group interaction to help nurture the sense of open exchange and collaborative search for solutions. The evaluation shows that qualitative research is a major strength, as it enhances listening and a rich

understanding of community perspectives. The interventions in the evaluated countries were clearly responsive to this understanding.

In other words, enhanced data collection associated with TIP can be a means to two ends: building in-depth understanding on the side of researchers, health authorities and service providers; and building trust and helping to break barriers of misunderstanding on the side of community groups. Ideally, TIP involves an extended commitment to community engagement, taking it beyond identifying access barriers to designing and implementing changes that tailor existing services to unique community needs when routine approaches have failed.

4.3.3 Reaching the intervention stage – ensuring long-term change

The current TIP guide emphasizes its role as a **diagnostic tool** to understand the causes of undervaccination among specific groups or segments in society. Implementing innovative strategies that emerge from diagnosis is implied as the logical next step. However, experience from the first round of TIP in countries shows that implementation – i.e. **changing immunization systems and service delivery culture** – is a long and difficult process. In fact, one country did not reach the intervention stage, and others have only taken the first steps in a longer process towards change.

Evidence from the evaluation shows that the diagnostic phase of TIP alone can have positive effects in building trust and better understanding between focal communities and care providers. But there is a clear danger that overinvesting in the diagnostic phase may come at the expense of implementing the ideas that emerge. Consequently, the evaluation committee felt that the second round of TIP should clearly emphasize intervention as the ultimate goal, and design methods to incentivize the move to piloting or scaling up ways to tailor services.

A number of strategies were discussed to encourage this shift in emphasis.

- **Integrated diagnostic/intervention designs** should start with the end in mind. TIP evaluations that begin with intervention as the goal will have a greater chance of reaching the final stage. The revised guidance documents could place greater emphasis on strategies to translate the diagnostics of the formative analysis into achievable interventions. They might make available ideas about what has been tried in the past (outlining the key principles of intervention, what other countries have tried and promising practices from other fields).
- **A shortened diagnostic exercise** should be followed by more **in-depth qualitative evaluation**. Since no one set of interventions is likely to solve all problems, it may be better to start intervening to evaluate and refine over time (“action research”). The initial diagnostic phase can be truncated by using rapid assessment methods, identifying the most obvious barriers affecting target communities and starting the intervention phase as quickly as community engagement allows. The evaluation shows that the initial part of the formative phase – gathering available information and developing a SWOT analysis through broad stakeholder and community engagement – yields a strong foundation for designing initial interventions. Community engagement can be fostered through the process of implementation itself. Deeper qualitative analysis can come as part of the evaluation phase, where intervention design can be refined and deeper insights into remaining barriers gathered at the same time.
- **Seed funding** should be made available for the **intervention and evaluation phases**. WHO should set aside resources for developing, implementing and evaluating an intervention, conditional on timely completion of the diagnostic phase of the study.
- Emphasis should be placed on **monitoring and evaluating impact**. The ultimate success of TIP must be

an increase in vaccination uptake. It is clear that changing service delivery is a long-term process of change, but the impact in terms of increased vaccination coverage should be monitored and documented.

4.3.4 Calling for local leadership and investment

The evaluation results suggest that successful TIP implementation requires a **local institution with a long-term commitment to lead** the process. Ideally, to ensure implementation of interventions, implementing partners should be engaged from the early phases – be they government or decentralized institutions that govern health services.

Because TIP encourages application of social science methods to enhance listening and engagement, national teams need to ensure available capacity for designing, collecting, analysing and presenting observational, qualitative and/or survey research. Where TIP results in change of practice, capacity to design and evaluate programmes is also strongly advised. In light of such requirements, the evaluation committee recommends that countries considering their own TIP projects should complete a **basic needs assessment** as a way of communicating the commitment expectations to implementers and highlighting capacity-building needs. As part of the new materials WHO could develop a checklist for such a needs assessment.

Finally, WHO should develop and share an “exit strategy” for every country, and return to each country to assess progress and determine what might be useful to help ongoing intervention – for example, undertaking a follow-up assessment, including high-level advocacy meetings. Herein lies the value of ongoing WHO involvement.

4.4 Potential for adaptation of TIP in other health areas

TIP’s overall value involves participatory appraisal. To that extent, the principles are relevant to other settings such as outbreaks and emergencies. They should be applied routinely in such circumstances as good public health practice.

In addition, the value of the TIP approach is demonstrated by its replication and demand in other areas such as antimicrobial resistance and seasonal flu vaccination for health care workers. The contexts in which TIP approaches may be of use include those that relate to strengthening service delivery.

It was recommended that WHO retain a focus on immunization for the next package of TIP materials. It would be useful for “TIP 2.0” to be established and have proof of concept prior to active cross-adaptation.

The committee also considered whether TIP should be used in an emergency or incident response. Other materials which may be available for such instances should be explored by WHO. For TIP to be applicable a “rapid” version would be required. In its current form, TIP-related activity is best undertaken in a non-emergency situation – for example, as a core part of planning for such events, so that agencies are better able to reach communities if and when such incidents occur.

5. Conclusions

In conclusion, the evaluation committee conclusions and recommendations for each of the four areas are summarized below.

5.1 Knowledge of TIP

The evaluation committee concludes that national immunization managers in the Region are generally aware that TIP exists (although the actual focus and intentions of TIP are not well understood by all). There is also strong demand for the type of research TIP addresses. The committee recommends the following.

- WHO should continue to raise awareness of TIP in countries through presentations at relevant meetings.
- WHO should facilitate TIP capacity-building through training workshops.
- WHO should also facilitate experience-sharing between countries (which will also allow WHO to learn from users) through a community of practice established to ensure exchange of lessons learned and insights gained between TIP-implementing countries (such as a yearly peer network workshop).
- WHO should continue to support TIP processes in countries through technical support in initiation, skilled facilitation of the TIP process and TIP documents and tools, while also ensuring local ownership and investment.

5.2 TIP guidance material

The TIP guidance material was generally successful in giving confidence to programme managers to embark on the process, but was also described as overly long and parts of it as unwieldy. The evaluation committee recommends that a revised manual should:

- be significantly shortened and simplified;
- retain structured step-by-step guidance;
- retain the strong WHO branding;
- include more focus on translating diagnosis into implementation.

In addition, the following supporting materials are recommended, among others:

- a brief central document with the addition of supporting materials as appendices or in a web-based repository;
- digital communication tools for enhanced access to TIP, such as online videos or infographics;
- features of the central document and supporting materials, tailored to key TIP audiences;
- a repository of national documents used for the TIP process, including “best practice” options;
- a checklist for a basic needs assessment in countries prior to a TIP project.

5.3 TIP implementation

TIP has several core components that distinguish it from other assessment techniques. The evaluation committee’s recommendations on how these components may be sustained/enhanced in the next phase of TIP are as follows.

- TIP begins with identification of **clearly defined population groups** whose lack of full participation in immunization programmes could have an impact on public health. This is a strength that should be

maintained, as it enables a specific, tailored approach to group(s) where reasons for undervaccination are complex and require further insight to inform solutions.

- **Community engagement** lies at the heart of the TIP strategy to identify and overcome barriers to immunization. It begins by including members of underserved population groups among active stakeholders that will define barriers to immunization and design solutions to overcome them. Ideally, TIP should involve an extended commitment to community engagement, taking it beyond identifying access barriers to designing and implementing changes that tailor existing services to unique community needs when routine approaches have failed.
- The current TIP guide emphasizes its role as a **diagnostic tool** to understand the causes of undervaccination among specific groups or segments in society. Implementing innovative strategies that emerge from diagnosis is implied as the logical next step, but this must not be taken for granted. The second round of TIP should clearly **emphasize intervention** as the ultimate goal, and design ways to incentivize the move to piloting or scaling up ways to tailor services.
- The evaluation results suggest that successful TIP implementation requires a **local institution with a long-term commitment to lead** the TIP process. Ideally, to ensure implementation of interventions, implementing partners should be engaged from the early phases – be they government or decentralized institutions that govern health services. WHO should also develop and share an “exit strategy” for every country, and return to each country to assess progress and determine what might be useful to help ongoing intervention.

5.4 Potential for the adaptation of TIP in other health areas

The principles and approaches of TIP are relevant to other settings such as outbreaks and emergencies. They should be routinely applied as good public health practice and are particularly relevant in situations related to strengthening service delivery. The evaluation committee recommends the following.

- WHO should retain a focus on immunization for the next package of TIP materials. It would be useful for “TIP 2.0” to be established and have proof of concept prior to active cross-adaptation.
- For TIP to be applicable in an emergency or incident response in health a “rapid TIP” version would be required. In its current form TIP-related activity is best undertaken in a non-emergency situation – for example, as a core part of planning for such events, so that agencies are better able to reach communities if and when such incidents occur.

In summary, based on data collected for the TIP evaluation, the evaluation committee concludes that the idea of strong community engagement and targeted tailoring of services remains as compelling as ever, and is supported by the majority of countries in the WHO European Region. However, it is important to emphasize that the purpose of TIP is not simply to diagnose enablers and barriers to immunization uptake but to intervene appropriately and effectively and ensure long-term change.

Annexes

Annex 1. Regional survey of TIP

To assess and explore national immunization programme managers' views on the issues and challenges TIP seeks to address, as well as their specific knowledge and perceptions of TIP, a web-based survey was conducted with EPI managers in 46 countries in the WHO European Region that, at the time of the evaluation, had not yet embarked on a TIP project.⁸ The questionnaire was developed in English by the evaluation committee, translated into Russian and pre-tested in both languages in two rounds, with a total of 12 test respondents who worked closely with the end-respondents and knew the countries and health contexts, to ensure clarity and ease of understanding. Small changes were made in the wording of the questions based on the pre-tests. The final questionnaire included 15 closed questions and eight open-ended questions. At the end of the survey, an optional question invited respondents to give their names and contact information.

- On 1 November 2016, the survey was sent by the WHO Regional Office for Europe via a link in an email to 69 respondents (national immunization managers or those in similar positions).⁹ A reminder was sent on 4 November 2016.
- Forty responses were received, of which 16 were anonymous. Of the 24 non-anonymous responses, two were from the same country, so it can be assumed that up to 39 Member States (85%) responded. The non-anonymous responses reflected the diversity of the Region (for example, in terms of language, culture and health systems), coming from countries in central Asia, the Caucasus and the Balkans, as well as central, western and eastern Europe. After four responses containing answers to only two questions were excluded, 36 questionnaires were analysed. Descriptive statistics were generated for all closed questions and missing answers were excluded. Similar comments left in open-ended questions were grouped together.

Survey results

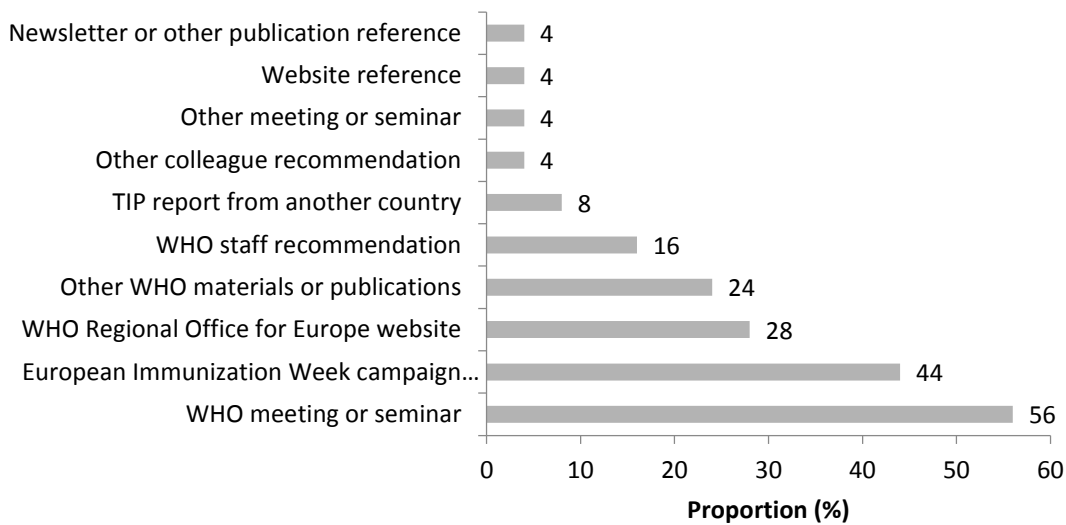
Awareness of TIP

The majority of respondents (80%, n = 28) were aware of the ongoing work of the Regional Office to assist countries in analysing barriers and enablers to vaccination in unvaccinated population groups. The majority (69%, n = 25) had also heard of the TIP tool before, most of them through WHO (Fig. 1).

⁸ There are a total of 53 Member States in the Region. Bulgaria, Germany, Kazakhstan, Lithuania, Montenegro, Sweden and the United Kingdom were excluded as they had all conducted a TIP or TIP FLU project.

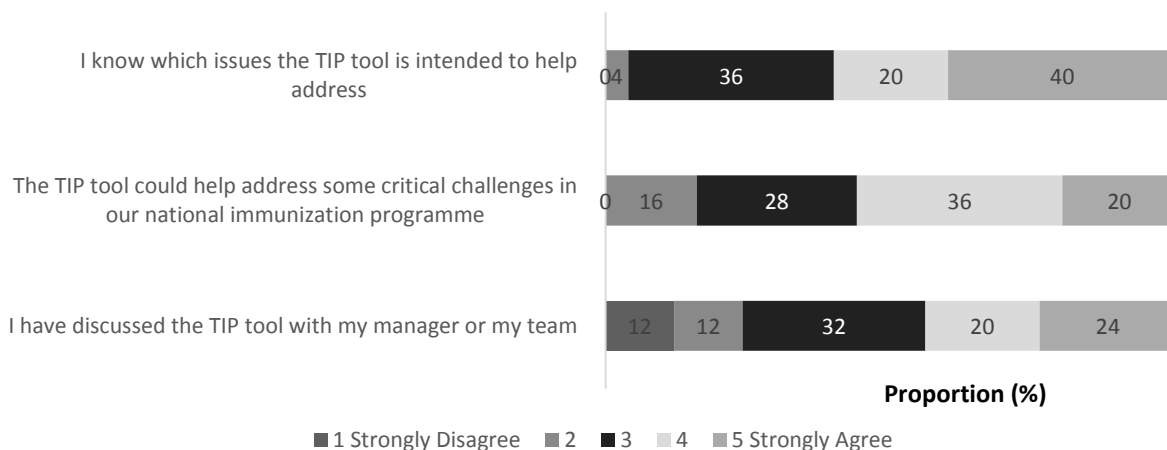
⁹ The survey was also sent by mistake to one respondent in a country that had conducted a TIP project. The response from this respondent was excluded from the analysis of results.

Fig. 1. Where did you first hear of the TIP tool? (n = 25; multiple answers possible)



Different questions assessed the level of knowledge of the TIP tool and approaches (Fig. 2). Most respondents knew the issues the TIP tool is intended to address (60%, n = 15 strongly agreed or agreed) and considered that it could address critical challenges in their national immunization programme (56%, n = 14 strongly agreed or agreed); 44% (n = 11) had discussed the TIP tool with their managers or teams.

Fig. 2. Awareness and understanding of the TIP tool (n = 25)



TIP capacity in countries

In the subsequent section of the questionnaire, respondents were asked about the resources, skills and decision-making processes in their country for a potential TIP project. While knowledge of TIP was widespread, roughly half or fewer respondents reported having the necessary resources or backing to conduct a TIP in their own country (Fig. 3 and Fig. 4).

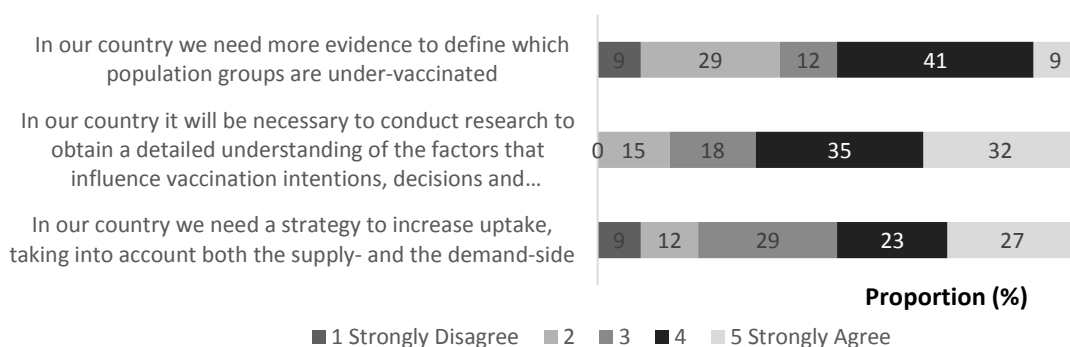
In addition, 10 of the 17 comments provided by respondents on the most important challenges concerned the need to enhance vaccine acceptance by better informing the population about the importance of vaccines (in general or for specific vaccines such as human papillomavirus (HPV)) or addressing anti-vaccination claims. The comments included references to: “convincing people of the severity of the disease

and of the vaccine’s safety”, “increasing HPV vaccine confidence and sustaining confidence in other vaccines” and “anti-vaccine lobbyists and misinformation on various media especially social media”. Other comments concerned the need for better training of health care workers (n = 2) or the challenges in identifying undervaccinated groups and the limited resources available to reach them (n = 5).

Fig. 3. Countries’ resources and skills to implement a TIP project (n = 36)



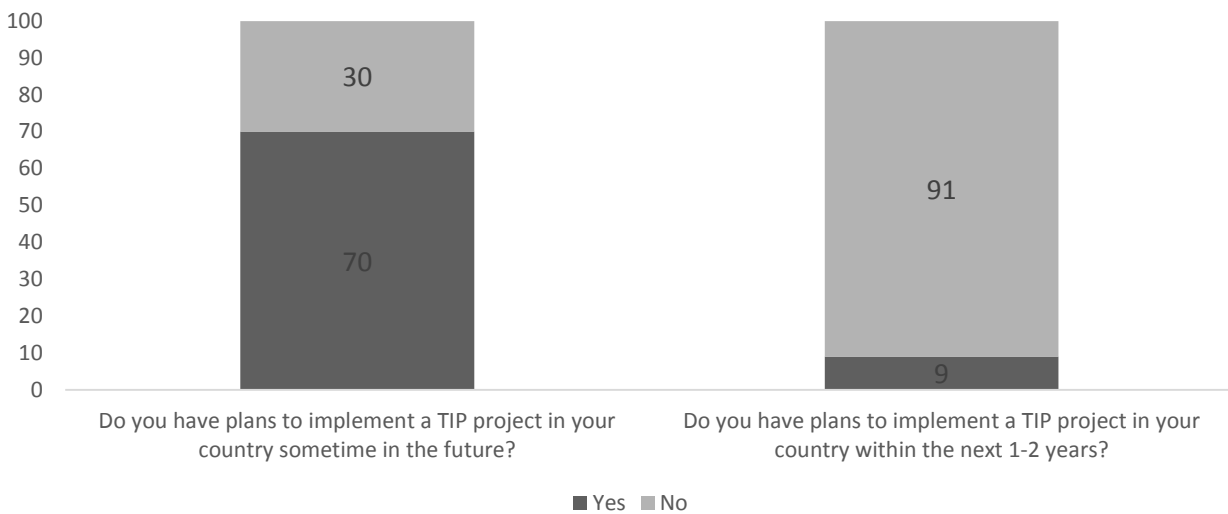
Fig. 4. Knowledge of undervaccinated groups in countries and needs for strategies (n = 34)



TIP plans in countries

The final section of the questionnaire was about countries’ plans to conduct TIP or similar projects to reach undervaccinated groups. Overall, 74% of respondents (n = 23) indicated that their countries were planning to conduct research to better understand the factors that influence vaccination intentions, decisions and behaviours in undervaccinated groups, and 70% were also considering implementing a TIP project at some point in the future. However, only 9% (n = 3) were planning a TIP project in the next year or two (Fig. 5). Respondents noted that these future TIP projects planned to target: “migrant populations or refugees”, “vaccine opponents”, “particular vulnerable populations, health care specialists and adolescents”, “Roma population”, “undervaccinated groups of parents, media” and “highly educated parents with anti-vax opinions”.

Fig. 5. Countries' plans to implement a TIP project (n = 33)



Six respondents indicated that their countries had considered implementing a TIP project in the past but had not done so. The main reasons for this were lack of resources or expertise (n = 2), lack of communication or engagement among stakeholders (n = 3) and issues due to frequent changes in organization and management (n = 1).

Respondents were also asked in an open-ended question what else they would need to know about the TIP approach in order to consider it for use in their country. Of the 12 comments provided, three called for more information from other countries who have implemented a TIP project; five concerned the need for more detailed guidelines, tools and training; two requested technical support from WHO; and one concerned the need to raise awareness of TIP among stakeholders. In an additional comment, one respondent also asked WHO to establish a network of experts and immunization managers interested in this area of work – and offered to host the first meeting of such a network.

Conclusions

This survey of WHO Regional Office for Europe country immunization focal points indicates that there is strong demand for the type of programmatic research addressed by TIP and strong awareness of the TIP approach itself. The degree of interest in the approach is suggested by the unusually high response rate for the opt-in web-based survey tool (85%) compared to the usual response rate of around 35%. With many respondents agreeing that their country needs to “conduct research to obtain a detailed understanding of the factors that influence vaccination intentions, decisions and behaviours in undervaccinated groups”, there also seems to be acknowledgement of the need to explore and better understand barriers and enablers to vaccination in specific groups. The motivation for national efforts in this area is evident from the fact that more than half of the respondents indicated an intention to implement a TIP project in their country in the future. Some countries even reported national TIP projects WHO had not been aware of.

Some of the survey responses, however, indicated that while TIP as is a well-known brand, the TIP focus and process might not be well understood. Indeed, it cannot be concluded from these results that countries have a clear understanding of what the TIP process involves.

Finally, it should be noted that more than half of the respondents did not feel certain that they had the necessary funding, and more than half did not feel certain that they would be able to allocate the necessary

human resources to conduct a TIP project. These are important obstacles that need to be taken into account in future TIP work in the Region. Likewise, many respondents clearly expressed the need for TIP guidance, tools and WHO support in this area.

Annex 2. TIP evaluation mission report, Bulgaria

TIP Evaluation Mission Report

Bulgaria

October 11-14, 2016

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Executive summary

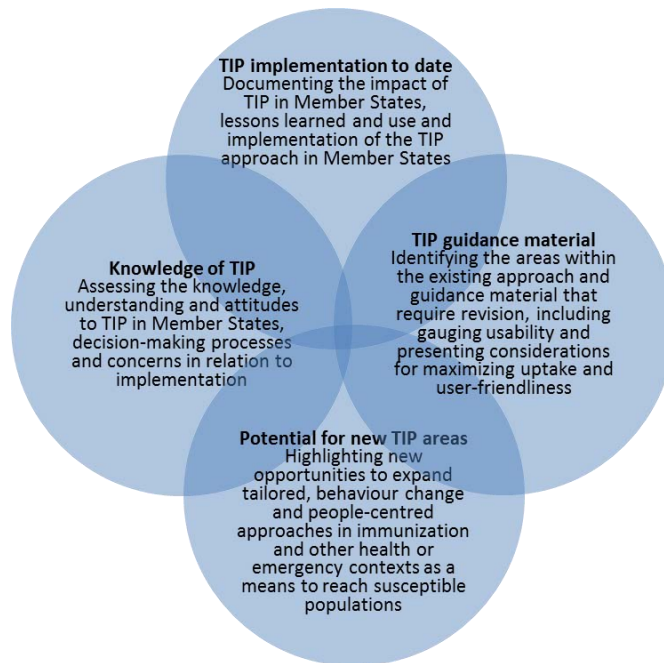
On October 11-14, 2016 a mission was undertaken to Sofia, Bulgaria to evaluate the *Tailoring Immunization Programme* (TIP) project in Bulgaria with the aim to summarize lessons learned, assess the possible impact of the TIP project and prepare recommendations regarding the further use and development of the regional TIP tool and approach. Key conclusions and recommendations include the following:

- - The TIP process of diagnosing barriers and enablers to vaccination among susceptible population groups was largely successful in Bulgaria.
 - Implementation of the TIP recommendations was less successful in Bulgaria due to a variety of challenges, particularly limited Minister of Health (MOH) staff and resources to carry out TIP recommendations.
 - TIP diagnostics by themselves may not be sufficient for TIP to have a sustainable impact in middle and lower income countries due to limited resources available for implementation of TIP recommendations. It could be useful to develop additional elements as part of TIP for these settings. This version of TIP would include a specific focus on selecting a small number of interventions that can realistically be implemented with existing resources, an additional TIP workshop after 6 months to assess progress on implementing recommendations, and – if deemed necessary – advocacy with decision-makers to ensure sustainable funding of activities.
 - There may still be opportunities for TIP to have an impact in Bulgaria. It is recommended that Bulgaria MOH consider revisiting the report and selecting specific recommended activities for implementation, potentially in a dialogue with WHO.

Introduction

Sub-optimal vaccination coverage threatens to jeopardize progress towards disease elimination and allow diseases, such as diphtheria and pertussis to re-emerge in the European Region. Drawing on the medical humanities, social sciences, ethnographic research techniques and behavioural insights method, the WHO Regional Office for Europe in 2013 developed the *Guide to Tailoring Immunization Programmes* (TIP). The TIP tool and approach offered Member States a process through which to identify susceptible groups, diagnose health seeking behaviour barriers and motivators, segment the population according to behavioural determinants and to go forward in designing a tailored intervention to maximize benefits and minimize barriers to vaccination.

To explore the potential bottom-line health impact of this tool and approach and to take stock of its use and implementation in Member States with a view to recommending the next phase of this work, a regional-level external review was conducted in 2016. Focus areas of the evaluation were:



Evaluation mission to Bulgaria on October 11-14, 2016

As part of the regional TIP evaluation, missions were conducted to TIP-implementing Member States in the WHO European Region, including to Bulgaria. The mission team comprised Victor Balaban, US CDC, as an external evaluator and Katrine Bach Habersaat, WHO Regional Office for Europe, as a coordinator and observer. The aim of the mission was to summarize TIP-related actions taken and lessons learned, prepare conclusions concerning the potential impact of the TIP and prepare recommendations concerning the further development of the TIP tool and approach. A series of meetings and interviews with stakeholders were conducted to explore the use, usefulness and implementation of the TIP tool and approach in Bulgaria and to assess the potential health impact of the TIP. This report was developed by Victor Balaban and presents the conclusions and recommendations from the mission team.

Overview of stakeholders met

- **Dr Radosveta Filipova**, State expert, Health Promotion & Diseases Prevention Directorate, Ministry of Health (Immunization Manager)
- **Dr Kremena Parmakova**, Health Promotion & Diseases Prevention Directorate, Ministry of Health
- **Ani Dimitrova**, school nurse, Roma community
- **Meri-Lin Krachunova**, inspector, Health Promotion Department in the Regional Health Inspectorate (RHI) Sofia city
- **Vania Terzieva**, Health Promotion Department in the Regional Health Inspectorate (RHI) Sofia city
- **Hristo Nikolov**, Roma health mediator
- **Latina Kovacheva**, school director, Roma community
- **Immunization manager** at the Immunization Centre of Sofia Regional Health Inspectorate
- **Lilly Marinova**, chief expert at the Immunization Centre of Sofia Regional Health Inspectorate
- **Ivanka Abadjieva**, National Health Mediator Association
- **Michail Okoliyski**, Head of WHO Country Office, Bulgaria

Reports and documents reviewed

- Terms of Reference for Dr. Radosveta Filipova and Ms. Galya Traykova (MoH staff engaged on consultant terms)
- Materials from mission 30 May-1 June 2012:
 - Agenda
 - Proposed schedule and timeline for roll-out of TIP in Bulgaria
 - Presentation of TIP and proposed ideas – for MoH
 - Trip report
- Materials from mission 9-14 September 2012:
 - PP presentations
 - Maps with coverage data
 - Situation summary
 - Materials from workshop with key government/NGO stakeholders, Sept 2012 – agenda
 - Materials from workshop with Roma health mediators, Sept 2012 – agenda, role play on vaccination decision-making, handouts, presentations
 - Trip report
- Research materials from research company (OSI Bulgaria):
 - TOR for research

- Timeline
- Quotes from 3 research providers
- Topic guide, in-depth interviews with Roma parents
- Topic guide, in-depth interviews with medical practitioners
- KAP questionnaire, Roma parents
- Report with conclusions on qualitative and quantitative research
- Materials from mission May 2013:
 - Agenda for workshop on “Presentation of the Results and Recommendations from the Pilot Application of the Guide to Tailoring Immunization Programmes (TIP) among Vulnerable Communities in Bulgaria”
- SWOT analysis
- National Roma Integration Strategy 2012-2020

Final report for TIP Bulgaria

- Custom solutions with specific interventions for 1) Health mediators, 2) Parents/caregivers and 3) Health professionals.

Background: Situation

Bulgaria suffered a measles outbreak in 2009-2011 which resulted in over 24,000 measles cases, causing hospitalizations, illness and deaths. The outbreak originated within and primarily affected un- or partially-vaccinated children and adults from vulnerable, marginalized households in poor residential neighborhoods. An estimated 21,701 (89.1%) of cases and 22 (91.6%) deaths occurred within Roma households. The rapid spread of the epidemic was largely due to long-lasting issues and challenges pertaining to immunization among vulnerable population groups, primarily Roma.

Background: The choice and use of the TIP methodology and materials

The rapid spread of the Bulgaria measles epidemic was a result of low vaccination coverage among hard-to-reach populations of Roma origin. TIP was being developed by WHO at that time as a methodology and toolkit to boost national and sub-national coverage among vulnerable and at-risk populations, and the Bulgaria epidemic presented an opportunity to pilot test the TIP. Dr. Angel Kunchev from the Bulgaria immunization programme was contacted by Robb Butler of the WHO Regional Office for Europe (WHO/Europe) about the feasibility of piloting the TIP methodology in Bulgaria while developing it. In February 2012, WHO/Europe requested permission to work in collaboration with Bulgaria's National Immunization Programme (NIP) to conduct a pilot project in 2012.

Background: The TIP process and project

WHO engaged an international social marketing and communications consultant, Nathalie Likhite to help coordinate the Bulgarian TIP while at the same time developing the TIP methodology and a TIP guide book. Three TIP missions were conducted in 2012-13.

Mission 1: The first mission to Bulgaria in May/June 2012 was dedicated to orientation and planning. Robb Butler and Nathalie Likhite gave an introduction on the pilot project to the MOH and WHO/Bulgaria and scheduled work for the subsequent months. The WHO team met with members of the national immunization programme, MOH, international partners and national immunization programme partners.

Mission 2: The second mission was conducted in September 2012 and was dedicated to testing the formative phase of the toolkit. Nathalie Likhite was joined by Ms. Lora Shimp, specialist in immunizations research and communications from John Snow, Inc. (USA), subcontracted by WHO to assist in developing a research protocol and tools to support the TIP formative phase. Ms. Likhite and Ms. Shimp conducted stakeholders workshops with institutional partners (MOH, PHI, NHIF, medical associations and NGOs) and health mediators. A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was conducted during the workshop to assess the immunization situation and determine research objectives.

OSI-Sofia Research Agency was selected in October 2012 to conduct primary research. A Knowledge, Attitudes and Practices (KAP) survey conducted in November-December 2012 collected information from 240 respondents, all primary caregivers of children aged 0 to 36 months. The survey found that measles immunization and child vaccination had improved since the 2009-2011 outbreak in Bulgaria thanks to

measures taken by the MOH, but there were still pockets of under-vaccinated children and children with unknown vaccination status in Bulgaria. Immunization delays were found to be frequent as a result of illness and poor health of children, leading to legitimate or false contraindications. The survey estimated that 16,216 Roma and 14,333 Turks aged 0-9 years were missing at least 1 vaccination for their age. A final research report was submitted by OSI in February 2013. Qualitative research was also conducted through in-depth interviews with Roma parents and medical practitioners to explore barriers and enablers to vaccination. This resulted in the identification of four segments with different behavioural determinants; The late child, The mobile child, The invisible child, The wary caregiver, and The poor child.

Mission 3: In May 2013, a presentation of OSI-Sofia Research findings and the analysis and results of the TIP pilot application in Bulgaria were presented to and discussed with the MOH and selected partners.

A final Report on the TIP pilot in Bulgaria was completed in June 2013 and was distributed to attendees from the May 2013 meeting: <http://www.euro.who.int/en/health-topics/communicable-diseases/poliomyelitis/activities/tailoring-immunization-programmes-to-reach-underserved-groups-the-tip-approach/tip-country-projects/tip-implementation-in-bulgaria>.

Conclusions: TIP implementation and impact in Bulgaria

TIP Process

The TIP process in Bulgaria was largely successful. Participants in the workshops described them as helpful and reported several important outcomes from the TIP:

- TIP was valuable in helping the Bulgarian MOH understand the value of behavioural approaches to immunization. Through accurate and well-done diagnostics the qualitative research and the survey provided valuable data which they did not have before. Outcome and recommendations to date are perceived as valuable.
- The TIP workshop led to the development of an internet site for VPD on the MOH website.
- The OSI survey provided data specifically on Roma populations which had not been available earlier since Bulgarian immigration and census data does not identify ethnic groups.
- WHO also benefited from the Bulgaria TIP pilot in the development of the TIP guide, which underwent beneficial revisions and refinement at each stage of the Bulgaria pilot project.
- Although not exclusively results of TIP, some subsequent activities were informed by some of the same ideas that had been discussed during the TIP, e.g.:
 - Trainings conducted for Health Mediators
 - MOH efforts to involve General Practitioners (GPs) e.g.
 - Increased collaboration with national and regional organizations of GPs and Pediatricians
 - Two regional meetings were held with GPs and Health Mediators where the topic was immunization and the MOH presentation contained slides on TIP
 - A National Immunization Registry had already been proposed prior to the TIP, but was also included as one of the TIP recommendations. The registry is being developed and a pilot is scheduled to be conducted by end of 2016.

A few challenges were also reported during the TIP process:

- A change of research approach (sample size and selection of respondents) while the KAP survey was being conducted by OSI caused confusion about the survey among MOH staff. The changes may have been due to a change of staff in the OSI research agency, but the reasons for the changes were apparently not effectively communicated to MOH.
- A parallel health survey of Roma was being conducted by RHI and ECDC at the same time as the TIP was being conducted, but reportedly neither project was aware of the other at the time.

TIP Implementation

Implementation of the TIP recommendations was not very successful in Bulgaria due to a variety of challenges:

- The main challenge was (and remains) limited MOH staff and resources for VPD issues. MOH staff had to devote all their time to events which occurred after the TIP e.g. refugees, primarily from Afghanistan, Iraq and Syria beginning to arrive in Bulgaria in 2013-14; pentavalent vaccine shortages in 2014-15, so there were no resources available to implement TIP or to advocate for implementing the recommendations.
- Rapid turnover in MOH and other government ministries (e.g. Education and Finance) also made it difficult sustain support for implementing TIP recommendations. For example, since the TIP pilot, Bulgaria MOH has been reorganized multiple times, with 3 different Ministers of Health in 2014 alone.
- It is unclear how much MOH support there was for implementing the TIP recommendations. The Minister of Health was sent a copy of the report.
- Lack of institutional knowledge of TIP also made it difficult to sustain support for the TIP recommendations. For example, at the time of the evaluation mission Head of WHO Country Office, Michail Okoliyski had been working for WHO Bulgaria for one year and had not heard of TIP.
- The TIP report contained (too) many recommendations which made implementation unrealistic in the context of limited MOH staff and resources. In addition, some TIP recommendations were reportedly not understandable to all stakeholders.
- The TIP report was long, detailed and fairly technical in content and was not translated into Bulgarian.

Recommendations for the regional TIP evaluation

TIP diagnostics by themselves may not be sufficient for TIP to have a sustainable impact in middle and lower income countries due to limited resources to implement recommendations. It could be useful to develop additional elements as part of TIP for these settings. For countries where a WHO consultant is engaged to facilitate the process, this should be limited to technical support and process facilitation, and national counterparts should ensure project coordination and leadership and thereby ownership.

Some of the additional TIP elements that would be useful would include:

- Adding an implementation phase as part of the TIP, possibly including funding for follow-up technical support. This phase would involve an additional TIP workshop after 6 months to assess progress on implementing recommendations as well as providing an opportunity for advocacy with decision-makers to ensure national funding for implementation

- Specifically focusing TIP on selecting a small number of interventions that can realistically be followed up on in the short and longer term.
- Developing a template for a brief version of the TIP report with key conclusions, translated into national language(s), for wide distribution of conclusions and advocacy purposes.
- Ensuring links with all appropriate national and regional ministries and institutions are involved, e.g. Ministry of Education, Ministry of Social Affairs.
- Ensuring links with similar projects, ongoing or previous, that relate to the same target group

Country recommendations

It is recommended that Bulgaria MOH consider revisiting the report and selecting specific recommended activities for implementation, potentially in a dialogue with WHO. Although most of the TIP recommendations were not implemented in Bulgaria, there may still be opportunities for TIP to have an impact. Many of the VPD conditions that were present during the TIP continue to be issues in Bulgaria. There is currently concern at MOH that vaccine coverage in some populations is low and may be decreasing as a result of anti-vaccination messages in the Bulgarian media. MOH staff report that another measles epidemic is very likely, but no preparation is possible in current situation with insufficient staff, time or resources.

The outcome of the TIP is still perceived to be of value by MOH and stakeholders in Bulgaria. Stakeholder engagement was high during TIP and appears to continue to be so. Options to revive the Bulgarian TIP and ensure its implementation include:

- Developing a brief version of the TIP report, translated into Bulgarian, for wide distribution among stakeholders, including decision-makers.
- Considering WHO assistance in advocacy among decision-makers to ensure support and resources for implementation of TIP activities.
- Holding a follow-up TIP workshop to focus on selection and prioritization of a few realistic interventions that can be implemented with existing resources and realistic timetables. Some initial activities that were suggested by MOH are
 - Developing trainings for health mediators
 - Developing materials to train GPs how to talk to caretakers about vaccinations
 - Providing funding to print and distribute existing materials such as the job-aid developed by Regional Health Inspectorate (RHI)/ European Centre for Disease Prevention and Control (ECDC)
- Implementation of activities should include mechanisms for evaluation. For example, an evaluation of the Health Mediator programme would be valuable and would add value beyond the TIP.

Annex 3. TIP evaluation mission report, Lithuania

TIP evaluation mission report

Lithuania

October 24-27, 2016

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Executive summary

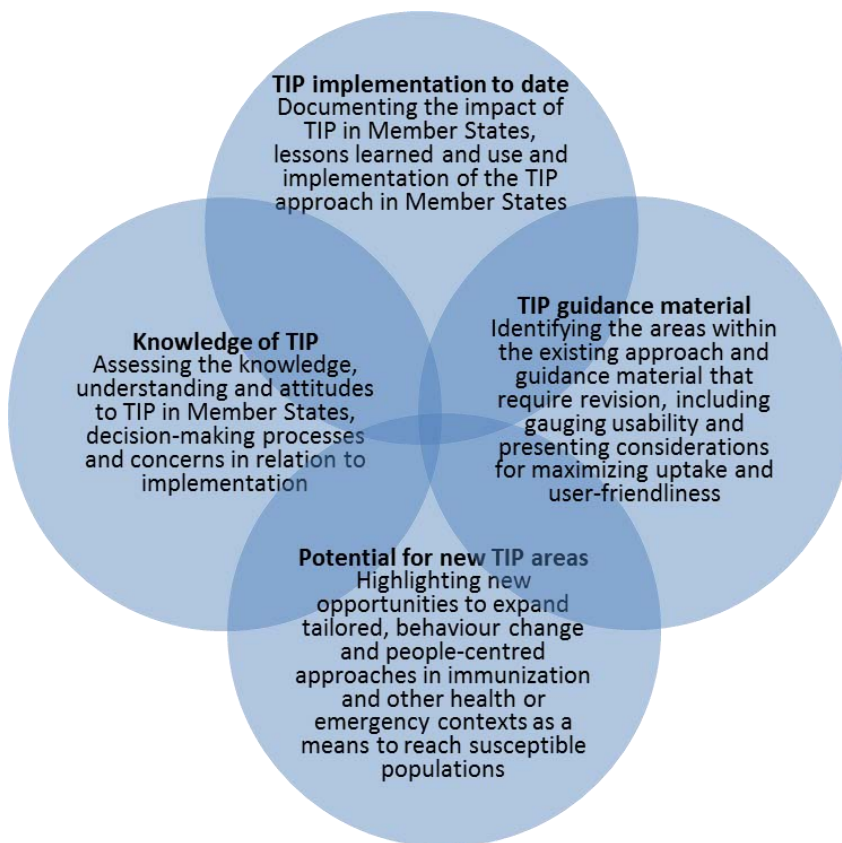
On October 24-27, 2016 a mission was undertaken to Vilnius and Kaunas, Lithuania, to evaluate the *Tailoring Immunization Programme* (TIP) project in Lithuania with the aim to summarize lessons learned, assess the possible impact of the TIP project and prepare recommendations regarding the further use and development of the TIP tool and approach. Key conclusions and recommendations include the following:

- The TIP project in Lithuania was initiated as a *TIP FLU for pregnant women* pilot project in response to very low uptake of seasonal influenza vaccination (SIV) among pregnant women in Lithuania.
- Although small in absolute terms the increase in SIV uptake among pregnant women (from 1.1% to 14.3%, based on results of a questionnaire survey conducted in one clinic and from 0,2% to 3.3% for Kaunas City based on SIV coverage rates data from Kaunas Department of the National Public Health Centre) was perceived to be a real success.
- The cross-institutional approach with engagement of several stakeholders was highly appreciated, and it was said that this usually rarely happens.
- The evaluation suggested that TIP has indirect added value in addition to the specific outcome of the process: Several stakeholders emphasized the value of the qualitative research stating that this is new to the public health setting. It was also said that testing communication materials happened “for the first time in history”.
- WHO held the coordination and technical support role throughout the implementation of TIP project. National stakeholders engaged felt ownership over their own part of the TIP implementation, but no one institution in the country felt ownership over the entire process. For long-term sustainability, efforts should be made to increase this local leadership of the project.
- Based on experiences from Lithuania three areas could be considered in relation to the regional evaluation of the TIP tool and approach: 1) applying TIP to different vaccination contexts; 2) TIP as a diagnostics tool only vs. action guiding tool and 3) the ownership and sustainability of TIP projects.

Introduction

Sub-optimal vaccination coverage threatens to jeopardize progress towards disease elimination and allow diseases, such as diphtheria and pertussis to re-emerge in the European Region. Drawing on the medical humanities, social sciences, ethnographic research techniques and behavioural insights method, the WHO Regional Office for Europe in 2013 developed the *Guide to Tailoring Immunization Programmes* (TIP). The TIP tool and approach offered Member States a process through which to identify susceptible groups, diagnose health seeking behaviour barriers and motivators, segment the population according to behavioural determinants and to go forward in designing a tailored intervention to maximize benefits and minimize barriers to vaccination.

To explore the potential bottom-line health impact of this tool and approach and to take stock of its use and implementation in Member States with a view to recommending the next phase of this work, a regional-level external review was conducted in 2016. Focus areas of the evaluation were:



Evaluation mission to Lithuania on October 24-26, 2016

As part of this evaluation, missions were conducted to TIP-implementing Member States in the WHO European Region, including to Lithuania. The mission team comprised Brent Wolff, US CDC and Eve Dubé, Research Center of the CHU-Québec as external evaluators and Katrine Bach Habersaat, WHO Regional Office for Europe, as a coordinator and observer. The aim of the mission was to summarize TIP-related actions taken and lessons learned, prepare conclusions concerning the potential impact of the TIP and prepare recommendations concerning the further development of the regional TIP tool and approach. This report was developed by Eve Dubé and Brent Wolff and presents the conclusions and recommendations from the mission team based on stakeholder interviews and key documents reviewed.

Overview of stakeholders met

A series of interviews with key stakeholders in maternal flu vaccination in Lithuania were conducted to assess how the TIP-FLU approach had been received and implemented and its perceived usefulness among participants and observers of the process. The following stakeholders were all interviewed in person (or by telephone where indicated below):

- Kaunas Municipal Public Health Bureau: Ms Kristina Motiejunaite, Director; Ms Monika Straupyte, Public Relations Specialist; Ms Renata Padleckiene, Public Health Specialist.
- Kaunas Department of the National Public Health Centre under the Ministry of Health (MoH): Orina Ivanauskiene, Head, Communicable Diseases Management Division, Kristina Rudzinskaite, Deputy Head, Communicable Diseases Management Division, Rima Gabrielaite, Public Health Specialist, Communicable Diseases Management Division
- Ministry of Health of the Republic of Lithuania (Vilnius): Ms Romalda Baranauskiene, Deputy Director, Personal Health Care Department; Dr Loreta Asokliene, Head, Division of Epidemiological Surveillance; Dr Nerija Kupreviciene, Chief Specialist, Division of Epidemiological Surveillance, Public Health Department; Ms Ausrute Armonaviciene, Head, Mother and Child Division, Personal Health Care Department.
- Centre for Communicable Diseases and AIDS (ULAC), (Vilnius): Prof Saulius Čaplinskas, Director; Joana Korablioviene, public health specialist; Asta Skrickiene, public health specialist; Gintare Bazeviciute, public relations specialist.
- Lithuanian University of Health Sciences, Kaunas: Prof. Meile Minkauskiene, Prof Ruta Nadisauskiene, Head of Dept. OB/GYN, Lithuanian university of Health Sciences; Vytautas Griška, PhD candidate and quantitative data analyst; Zita Streilcoviene, PhD candidate and qualitative data analyst.
- Dainava Polyclinics, Kaunas: Loreta Golubevskaite, gynecologist.
- Vilnius University Hospital Santariskiu klinikos Centre of Infectious Diseases: Prof. Ligita Jancoriene, Head of department for Infectious Diseases Consultations and Immunoprophylaxis.
- Lithuanian Society of General Practitioners, Vilnius: Dr. Sonata Varvuolyte, Chair.
- WHO Regional Office for Europe (Copenhagen by telephone): Pernille Jorgensen, Technical Officer and Nathalie Likhite, international consultant.
- WHO Country Office, Lithuania (Vilnius): Ingrida Zurlyte (Head of Country Office).

Reports and documents reviewed

Prior to arrival, the team reviewed the following documents:

- A draft version of the TIP Flu Report for Pregnant Women guide book;
- The situation analysis from the TIP FLU in Lithuania;
- Meeting Agenda – TIP Flu 2015/2016 Results and next steps;

- Main events in TIP Flu Process;
- TIP Flu Mission report 26-28 May 2015;
- Plan for meeting with TIP Flu Implementers in Kaunas March 2016;
- Proposed Agenda for the meeting with representatives from Social media groups for mothers.

Please note:

The TIP FLU research reports had not yet been finalized at the time of the mission and therefore were not reviewed.

Background: Situation and choice of the TIP approach

Applying the TIP approach to maternal flu vaccination in Lithuania was initially proposed by the WHO Regional Office for Europe through the WHO Country Office in Lithuania in 2015 in response to very low uptake of seasonal influenza vaccination (SIV) among pregnant women in Lithuania. SIV had been formally recommended and available free of charge for pregnant women in Lithuania since 2010 and accessible through the Lithuanian health system primarily from primary health care providers.

This situation was seen as an opportunity to pilot a new *TIP FLU for pregnant women* and through this process develop a WHO guide book for this particular area of intervention.

Lithuania was chosen as a pilot country for three reasons: 1) the country monitored influenza uptake among pregnant women, which only very few countries did at that time, 2) influenza uptake among pregnant women was unsatisfactory, 3) WHO had a 'biannual cooperate agreement' (BCA) with the Lithuanian MoH and a Country Office in Lithuania. Lithuania also had a previous survey of pregnant women knowledge, attitudes and behaviours (KAB) about SIV conducted by Kaunas University and access to data showing extremely low vaccine uptake rates.

Lithuanian officials from the Ministry of Health were approached by WHO and they endorsed the TIP approach to improve vaccination uptake rates. Throughout the implementation of TIP in Lithuania WHO continued to hold the coordination and technical support role.

Background: The TIP process and project

The short-term objective of the TIP approach was to build awareness, confidence and acceptance of SIV during pregnancy among HCPs and their pregnant women. The long-term objective was to establish SIV during pregnancy as part of routine practice to protect mothers and babies.

Following a situation analysis, and based on the findings of this, a pilot project to educate health care staff and raise public awareness about the importance of maternal flu vaccination through communication was implemented in Kaunas City (population of about 300,000). Advocacy activities were also initiated, resulting in a new pregnancy card and revision of the antenatal care guidelines. The main stakeholders were Lithuanian Ministry of Health (MoH), National Public Health Department of Kaunas, Kaunas public health bureau, ULAC (Centre for communicable diseases and AIDS), Lithuanian University of Health Sciences and four polyclinics providing services for most pregnant women in Kaunas urban areas.

In addition to the development and testing of communication products, surveys of pregnant mothers and health care staff in selected facilities in Kaunas District were conducted as part of the TIP formative research. They found that only 34 percent of health care workers themselves and a fraction of one percent of pregnant mothers had received flu vaccination as recommended. Reportedly¹⁰, qualitative data from focus groups with pregnant women and in-depth interviews with health workers subsequently revealed entrenched reluctance to giving vaccines during pregnancy among health care providers based on anticipated objections from their patients. Focus groups with pregnant women found concerns about the safety of vaccines for mothers and their unborn babies which had never been seriously challenged by the

¹⁰ Data from this research was not available at the time of the evaluation mission, but this was reported by several stakeholders.

medical establishment / public health authorities.

No major access barriers were identified in the situation analysis; cost or distance from providers were not seen to be major obstacles for the large majority of Lithuanian mothers. Lack of efforts to promote SIV of pregnant women appeared to be a more significant issue: vaccination had never been integrated in the routine practice of maternity care providers. Some public scepticism regarding role of the medical community in vaccination and distrust in flu vaccines in general after the A(H1N1) pandemic in 2009 were also mentioned. Most important may have been the fact that vaccination of pregnant women for many years had been advised against and the culture among HCPs of not intervening during pregnancy.

The specific activities conducted as part of TIP are listed below:

I. Country engagement and TIP national situation analysis

- October 1st, 2014: First email from ¹¹WHO Euro Office to WHO country office in Lithuania about the possibility to implement the TIP Flu approach for pregnant women
- November 2014: Official invitation letter issued by WHO Euro Office to the ministry of health in Lithuania asking them to participate in TIP Flu for pregnant women and preparation of the first mission (REB approval, identification of stakeholders).
- February 17, 2015: First mission of WHO to conduct the situation analysis among key stakeholders. Stakeholders were met individually or in small groups (the list of all stakeholders is available at the end of the draft situation analysis report).
- March – April 2015: Situation analysis shared with key stakeholders for feedback. NOTE: The report was written in English and sent back to all stakeholders for comments (not many recall receiving this, potentially due to language issue).

II. Pilot intervention in Kaunas and development of intervention materials

- May 26-29 2015: Second mission of WHO to meet with stakeholders in Kaunas to prepare the formative research (focus groups with pregnant women and interviews HCPs) and start working on communication materials for the intervention (it had been decided to develop information materials and conduct research in parallel). Meetings of WHO with social media representatives.
- June 30 – July 2 2015: WHO training of researchers in Kaunas University to conduct the qualitative research and meeting with ULAC about communication material development (official agreement was made with ULAC on development of communication materials).
- August-September 2015: Focus group studies with pregnant women and in-depth interviews with health workers conducted.
- September 21-24 2015: First Workshop in Kaunas to discuss the draft communication material prepared by ULAC. Preliminary results of the focus groups were presented by Lithuanian University of Health Sciences during this workshop. During this workshop, participants helped to revise the contents of promotional materials for printing and social media distributed by Kaunas Public Health Bureau.
- Fall 2015: Periodic lectures given to HCPs on SIV during pregnancy in Kaunas clinics.
- End of October 2015: Printed material was distributed in polyclinics in Kaunas urban area, although several weeks after the start of flu season in Lithuania starting October 1 according to informants.
- 2016: Policy and advocacy:

¹¹ The approach of working through the Country Office and sending an official letter to the MoH was decided upon as this was in line with WHO procedures.

- Issuance of new antenatal care guidance document from the MoH, now including maternal flu vaccine
- Revision of routine immunization card for pregnant mothers to include a standard question on flu vaccination
- Letter drafted by stakeholders for broad dissemination to public and private HCPs in Kaunas

III. Pilot evaluation phase and strategy revision

- March 2016: Third mission by WHO to evaluate the first year intervention (separate meetings with different groups of stakeholders in Kaunas and ministry of health in Vilnius).
- April – May 2016: Survey conducted with pregnant women (KAB and opinions of women about SIV and the communication material)
- June 2, 2016: Final workshop – presentation of the results of the project to all stakeholders and discussion about scaling up the project.
- Summer – Fall, 2016: Revision of the communication material (done by the Kaunas Municipal Public Health Bureau with support from the Lithuanian University of Health Sciences, including pre-testing the new material).
- September – October 2016: Lectures to physicians.
- October 27, 2016: New material is available and will be distributed to clinics.

Advocacy work included a letter signed by many stakeholders which was distributed to health care providers, articles on SIV that were published in medical journals, and lectures on SIV that were given by SIV during pregnancy “champions” (university teachers, medical specialists). The process and interaction with decision-makers also resulted in a revised pregnancy card and antenatal care guidance as mentioned above. However, most of the interventions were related to informing, educating and communicating with pregnant women and their maternity care providers about SIV during pregnancy: video, poster on bus, 33 meetings/seminars (21 (2015) +12 (2016) for health care providers and materials to distribute in clinics (poster, leaflet, questions and answers).

Conclusions

TIP impact

TIP was perceived as mostly positive by all key informants. Although small in absolute terms the increase in SIV uptake among pregnant women (from 1.1% to 14.3%, based on results of a questionnaire survey conducted in one clinic and from 0,2% to 3.3% for Kaunas City based on SIV coverage rates data from National Public Health Department of Kaunas) was perceived to be a real success. According to informants, many health providers had been convinced that nothing could persuade pregnant mothers to adopt this vaccine in this setting with a history of hesitance toward immunization during pregnancy. The fact that rates increased more than 10-fold in response to this limited intervention was effective in making many providers and health administrators question their own assumptions and reconsider active promotion of maternal flu immunization.

Advocacy work also led to concrete impact. The legislation was changed to include a routine question concerning SIV on the standard pregnancy card (a tool used by all maternity care providers). A new antenatal care guide was also developed and now includes information and recommendations on SIV during pregnancy.

After the pilot and the stakeholder workshop in June 2016, a decision was made to scale the project to Kaunas district as a whole. Discussions have started on the possibility of scaling up the project to national level.

TIP leadership

Although a national steering committee and the appointment of a national focal point were recommended by WHO, these suggestions were never realized. As a result, TIP implementation was effectively coordinated by WHO – with active engagement of multiple partners. All relevant stakeholders in Lithuania were informed at the national, regional and local levels, and some stakeholders were directly involved in the TIP flu activities (e.g. communication material development, formative or evaluative research).

The advantage of this was that the workload burden was not perceived as high (not perceived as involving too much work, activities were close to the regular work of stakeholders). WHO support and engagement was appreciated by all key informants and seen as critical to the success of the project. The disadvantage was that the process seemed to have been slightly fragmented, with stakeholders having different levels of knowledge of the overall process.

The fact that this project was conducted in one specific area also to some extent limited the engagement of stakeholders at national level. The community engagement was also minimal, reportedly because of the large target audiences of the project (pregnant women in Kaunas) making it difficult to find a few that would represent the diversity of this large target group.

Finally, it was noted as a factor limiting broad stakeholder engagement that documents were mainly prepared in English rather than Lithuanian.

In summary, the process engaged all relevant stakeholders, but did not succeed in creating a sense of overall ownership or leadership among the relevant stakeholders. For long-term sustainability, efforts could be made to increase this local leadership of the project.

TIP process

The evaluation suggested that the TIP process has indirectly added value in addition to the specific outcome of the process – especially in a country where the methodologies used are still novel. Several stakeholders emphasized the value of the qualitative research stating that this kind of research is still completely new to the Lithuanian public health setting. It was also said that testing materials happened “for the first time in history”.

The cross-institutional approach with engagement of several stakeholders was also highly appreciated, and it was said that this usually rarely happens.

As for the potential advocacy value of the TIP process, it was mentioned by several stakeholders that the fact that WHO recommends a specific approach carries weight and attracts the attention, also at higher levels.

Two process-related issues, however, were raised by informants during the mission:

It was noted that the formative research and intervention development were conducted in parallel to a degree where formative research results were reportedly not used in the development of the interventions (communication material) in 2015. In 2016, however, the testing of materials had a great impact on the new version.

The fact that many stakeholders were involved in the revision of the communication material was raised as an issue by informants (too long and too many changes) as it supposedly delayed the production of communication materials (available only after the beginning of the SIV campaign in both 2015 and 2016).

Recommendations for the regional TIP evaluation

The conclusions from and lessons learned in Lithuania – together with input from other countries – will be used as input in the **regional evaluation of the TIP tool and approach**. This report therefore includes recommendations on the points that should be discussed by the regional evaluation team. Based on this mission, we have identified three major areas for consideration to the regional evaluation of the TIP tool and approach and for future national TIP projects: 1) applying TIP to different vaccination contexts; 2) TIP as a diagnostics tool only vs. action guiding tool; 3) leadership of TIP projects.

1) Applying TIP to different vaccination contexts

Originally, the TIP was developed as a tool to reach specific susceptible population groups. TIP FLU has approached this differently and focused on larger groups such as health care workers or pregnant women. It should be discussed by the evaluation team if the TIP approach should be fundamentally different in these situations, and if so how.

In the particular situation in Lithuania where SIV uptake was near zero and where SIV was considered almost a new vaccine introduction, it is not clear whether a comprehensive (burdensome) TIP project was necessary or the issue was simply a lack of initial vaccine promotion. If TIP in fact marks the turning point in establishing maternal flu vaccine in Lithuania, which remains to be seen at this point, it will have succeeded, not least because it inadvertently identified an important source of hesitancy: not only among the target audience of pregnant mothers but particularly among health care providers themselves. This was achieved simply by demonstrating a tangible if modest increase in immunization rates where many providers assumed none was possible.

Finally, the relevance of developing different guides for different target audience or vaccines (i.e. TIP FLU for healthcare workers, TIP FLU for pregnant women) vs. having a generic tool can be discussed.

2) TIP as a diagnostics tool only vs. action guiding tool

The original TIP approach proposes an (often longer) process of situation analysis – qualitative and quantitative research – segmentation – intervention design – intervention implementation. In Lithuania the situation analysis was followed directly by both qualitative and quantitative research and intervention implementation, in parallel.

Ideally implementation should be in line with the formative research (which was not necessarily the case in Lithuania). However, it may be time, based on the experience from Lithuania, to question whether the emphasis of TIP should always be on the formative analysis *leading to* an informed intervention, or if an intervention itself that can be evaluated and improved over time. The situation analysis is a critical first step, but conducting formative research after the situation analysis might not always be needed or may only be needed for some interventions, and therefore could be dropped or conducted alongside implementation of initial activities (as was the case in Lithuania).

Workshops are highly appreciated by stakeholders and an important feature of TIP, but there is a need to discuss the format and goals: workshops to conduct situation analysis could be considered as the formative research in some situations, but only if successful in bringing the voices of all stakeholders including end-

users.

3) *The leadership of TIP projects*

Local leadership is critical for the success and sustainability of TIP projects. The approach used to enhance ownership and sustainability will be highly context-specific, but strategies to reach this objective should be discussed. The role of WHO is essential in supporting this, but ownership and coordination should be rooted locally. Among key elements that need to be discussed are:

- a. What should drive implementation of TIP? (e.g. request from member states, first analysis by WHO if TIP appropriate tool for the context, etc.).
- b. How may local/national ownership and leadership be strengthened (collective process to develop the situation analysis in the country (workshops); designated focal point; steering committee)?
- c. How to do better knowledge translation?
- d. When should WHO stop supporting countries after diagnosis and first interventions? “Exit strategy”?
- e. How to ensure sustainability when WHO support is over?

Country recommendations

Based on this mission, we suggest the following to ensure the continuous success of the TIP FLU project among pregnant women in Lithuania:

- A focal point should be assigned to ensure the sustainability and coordination of the TIP FLU outside of WHO and increase the potential to scale the project up to national level.
- For the future it is recommended to keep all stakeholders involved in the process of translating research into intervention ideas.
- It is recommended to evaluate the SIV training of health workers to assess whether lectures are sufficient to change their attitudes and practices, or if other interventions need to be developed, and resources be allocated to these.
- It is recommended to apply a “positive deviance” approach when analysing the results of the initial two years of intervention (looking primarily at the factors leading to *acceptance* of SIV by pregnant women rather than the barriers among those who still refused, to inform the continuous development of interventions).
- Demand barriers appear to be the dominant cause for low SIV vaccine uptake, no small part of which may be due to lack of recommendation by health care provider and lack of exposure to promotional materials. However, the evaluation shows that some structural barriers may also need to be addressed, including in relation to SIV providers.

Annex 4. TIP evaluation mission report, Sweden

TIP evaluation mission report

Sweden

14-15 November 2016

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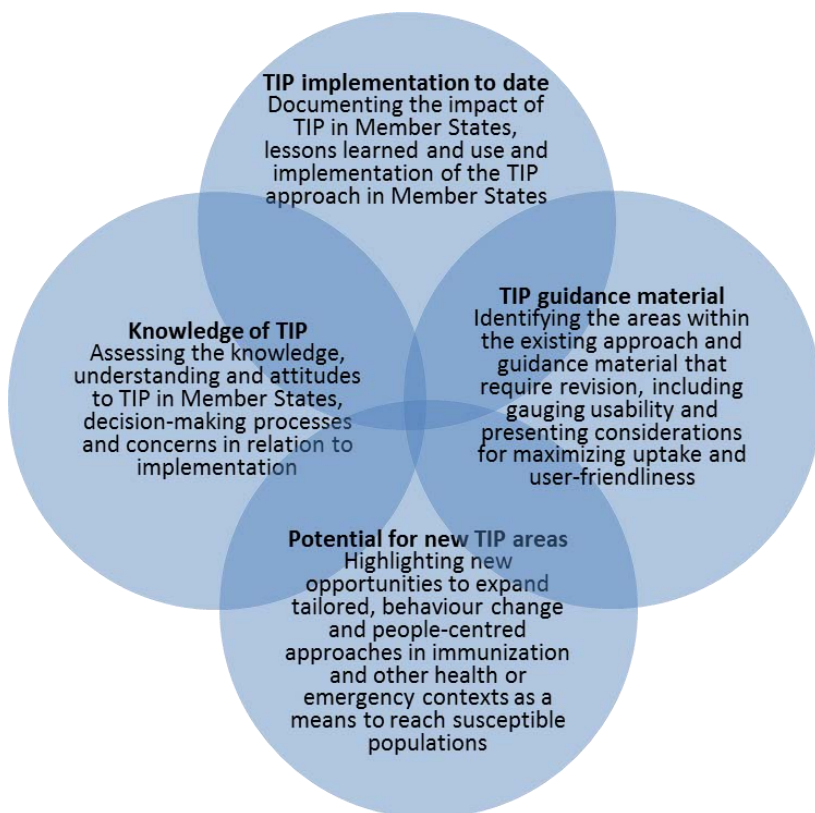
Executive summary

On 14-15 November 2016 a mission was undertaken to Stockholm, Sweden to discuss the *Tailoring Immunization Programme* (TIP) projects in Sweden, summarize lessons learned and assess the possible impact of the TIP projects in Sweden with the aim to prepare recommendations regarding the further use and development of the regional TIP tool and approach.

Introduction

Sub-optimal vaccination coverage threatens to jeopardize progress towards disease elimination and allow diseases, such as diphtheria and pertussis to re-emerge in the European Region. Drawing on the medical humanities, social sciences, ethnographic research techniques and behavioural insights method, the WHO Regional Office for Europe in 2013 developed the *Guide to Tailoring Immunization Programmes* (TIP). The TIP tool and approach offered Member States a process through which to identify susceptible groups, diagnose health seeking behaviour barriers and motivators, segment the population according to behavioural determinants and to go forward in designing a tailored intervention to maximize benefits and minimize barriers to vaccination.

To explore the potential bottom-line health impact of this tool and approach and to take stock of its use and implementation in Member States with a view to recommending the next phase of this work, a regional-level external review was conducted in 2016. Focus areas of the evaluation were:



Evaluation mission to Sweden on 14-16 November 2016

As part of this evaluation, missions were conducted to TIP-implementing Member States in the WHO European Region. This report focuses on a mission to Sweden in November 2016. The mission team comprised three behavioural scientists, Julie Leask (University of Sydney Australia), Brent Wolff and Victor Balaban (US CDC) as external evaluators, Lisa Menning (WHO headquarters) as an observer and Katrine Bach Habersaat (WHO Regional Office for Europe) as a coordinator and observer. This report presents the conclusions and recommendations from the team of this mission.

The aim of the mission was to summarize TIP-related actions taken and lessons learned, prepare conclusions concerning the potential impact of the TIP and recommendations concerning the further development of the regional TIP tool and approach. Over two days of meetings, the evaluation team met with staff and stakeholders directly and indirectly involved in the TIP process.

Overview of stakeholders met

Project group

Public Health Agency of Sweden

Ann Lindstrand, Head of Unit for Vaccination Programs, Pediatrician, MD, PhD

Karina Godoy, Project coordinator TIP, Public Health Researcher (MPH) and Microbiologist (PhD)

Asha Jama, Public Health Researcher (MPH)

Emma Byström, Public Health Researcher (MPH)

Susanne Karregård, communicator, Unit for Corporate Communication

Ulrika Dohnhammar, project coordinator TAP, Public Health Researcher (MPH), Unit for Antibiotics and Infection Control

Karolinska Institutet

Asli Kulane, Associate Professor International Health, Department of Public Health Sciences (PHS)

Stakeholders

Stockholm County Council (SLL), health care sector

Johanna Rubin, Senior Pediatrician, MD, PhD, Regional Preventive Child Health Services

Carola Schäfer, Head Child Health Clinic in Tensta, Regional Preventive Child Health Services

Margit Hyyryläinen, Head of nurses, Head Child Health Clinic in Tensta, Regional Preventive Child Health Services

Professionals and members of the Somali community

Asia Ali Mohamed, MD, Senior Physician, Child and Adolescent psychiatrist, expert on autism

Haibe Hussein, Coordinator of Health communicators, Transcultural Centre, Stockholm

Fardosa Omar, Community organizer, Biomedical Scientist (Master)

Overview of reports and documents reviewed

- Short report: *Short summary report on the implementation of the TIP toolbox at the Public Health Agency of Sweden - for external review of the TIP at the WHO Regional Office for Europe;*
- Long report: *Barriers and motivating factors to MMR vaccination in communities with low coverage in Sweden Implementation of the WHO's Tailoring Immunization Programmes (TIP) method;*
- Report from research with undocumented migrants: *Views, attitudes and experiences about childhood vaccination among undocumented migrants in Sweden - a qualitative study.* MPH Thesis of Karina Godoy Ramirez;

- Article: Pierre Van Damme, Ann Lindstrand, Asli Kulane, Angel Kunchev. Commentary to: Guide to tailoring immunization programmes in the WHO European Region Vaccine 2015. <http://www.sciencedirect.com/science/article/pii/S0264410X1500496X>;
- Article: Byström E, Lindstrand A , Butler R, et al. Parental attitudes and decision-making regarding MMR vaccination in an anthroposophic community in Sweden – A qualitative study. Vaccine (2014), <http://dx.doi.org/10.1016/j.vaccine.2014.10.011>;
- Interview guides developed at the Agency of Public Health in Sweden.

Background: Situation

At the start of the TIP process in 2013, measles continued to cause outbreaks in Sweden. Between 2004 and 2013, 179 cases of measles were reported in the country with 75 cases (42 per cent) acquired abroad.¹² A very high coverage rate for MMR in Sweden of 98% masked smaller areas and communities where coverage is intractably low or assumed to be low. Accordingly, three susceptible populations were identified:

- **Somali** community where regional MMR coverage was 70% and had not recovered since the Wakefield MMR-autism scare had affected coverage in Sweden.
- **Anthroposophic** community where a small sample of parents suggested coverage to be very low for MMR vaccine at 4.9% and slightly higher at 28% for DTP and polio vaccines.
- Poorly reached groups of **undocumented migrants**.

Previous attempts to approach anthroposophic and Somali communities had not gained traction.

Background: The choice and use of the TIP methodology and materials

The idea of applying the TIP approach came when Ann Lindstrand attended a WHO regional meeting at which Robb Butler presented TIP. The approach seemed to have clear utility with clearly defined steps and useful tools, including to identify communities who were susceptible. Robb's talk was inspiring and convincing. The Public Health Agency had staff with personal interest and dedication to vaccination and some were doing Masters degrees, requiring a research component, which was suited to the TIP task. There was concern about increasing hesitancy and professionals reported that parents tended to question vaccination more, although no opinion-tracking data was available at the time.

Background: The TIP process/project

- The WHO 'Guide to Tailoring Immunization Programmes (TIP)' was used in part with more focus on guidance for situational analysis and less on implementation;
- There was a central role of workshops with WHO in providing skilled facilitation;
- There was technical support from WHO and ECDC in form of clarifying and crystallising ways of segmenting the myriad of issues and approaches to communities.

¹² In the last three years (2014-2016), 26, 22 respectively 3 cases of measles have been reported of which the majority of the cases have been related to travel.

The process began with a decision to use the TIP approach and with engagement of decision-makers. This was followed by initial workshops, a review of coverage data, reference group engagement, stakeholder meetings, in-depth interviews, intervention design, intervention implementation (only Somali) and evaluation planning (ongoing). The three community studies involved four project staff including two students doing their MPH thesis projects. Stakeholders included members of community, health care providers, clinic staff, paediatric network doctors, communication experts, academics, ECDC. With respect to evaluation, the only method used at present is reviewing coverage, now and in the future, in counties where the Somali communities live. The project team are considering RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance <http://re-aim.org>) as an umbrella for both qualitative studies (ethical clearance obtained) and register studies (research plan and ethical application ongoing) for this evaluation and are requesting guidance on adopting with specific methods.

In taking TIP to the intervention stage, there was an explicit decision to choose the Somali community as a demonstration project. This was due to having embedded researchers (a factor considered so important that the antimicrobial resistance project TAP (Tailoring Antibiotics Programs) focused on Somali community too) in that Somali community. In addition, a reference group in the Somali community had already been set up by A/Prof Asli Kulane based on her previous research on tuberculosis. The intervention focuses on three pillars: community, peers and health care workers (HCW):

- Lectures to parents and health professionals with invited experts on vaccinology, vaccine impact and communication with vaccine hesitant parents;
- Using same channels as myths are spread through (e.g., word of mouth);
- Communication skills, MMR and autism information seminars for health professionals;
- Video with Fatima who is a community mother, community leaders, vaccine expert and Margit, the local clinic health nurse/vaccinator, made available on web / at clinic sites to initiate discussions in groups of parents
- Peer to peer educators from Somali community trained (14 mothers +18 last month + aim to recruit fathers in 2017);
- Power Point on how vaccination works and why for website.

As yet there has been only very limited interventions activity in the anthroposophic community and undocumented migrants.¹³ Given limited resources and opportunity costs, it was considered prudent to show impact of the Somali interventions before seeking implementation of interventions in the remaining two target groups. Despite this, the evaluation team heard mention of TIP revealing cultural openings for vaccination within the Anthroposophic philosophy that was otherwise implacably opposed. For example, the formative TIP phase learned that Anthroposophic parents might be willing to reassess risks and consider vaccination when they anticipated travel. Furthermore, the project team are less at risk of implementing inappropriate or potentially harmful approaches to such communities and the absence of intervention may be a resource saving if it is believed that no headway can be made for the effort required. This is a question of opportunity costs.

Conclusions: TIP implementation and impact in Sweden

The most useful aspects of WHO support included the WHO imprimatur which gave legitimacy and helped in

¹³ For the anthroposophic community, the engaged senior public health paediatrician Johanna Rubin held tailored educational seminars, including to discuss the TIP results with the staff of the public health clinic.

resourcing requests. Also, it was clear that intensive support throughout the formative phase from Robb Butler and Nathalie Likhite were central to the success of the process. This included skilled workshop facilitation, guidance on interview questions, and the guide itself which helped structure a process which may have otherwise been difficult to break into its component parts. In relation to the TIP guide, Figures 4 and 9 (step-wise approach and conceptual map) provided overarching guidance.

“The technical assistance from WHO was critical. They knew the tool so we could focus on the contents.”

In addition to WHO support, the success of TIP included factors intrinsic to the Swedish context: the committed leadership of Ann Lindstrand, cohesion and motivation among agency staff, and student capacity and thesis timelines; and project team members embedded in community.

TIP added value as an approach in a number of ways as set out below:

A MORE ENGAGED APPROACH: Staff established a common agreement and understanding of the challenges. The SWOT analysis was done together in the multidisciplinary group, ensuring different perspectives. Previous approaches had been top down and TIP brought greater understanding of and responsiveness to the community perspective. It is likely also that the process built trust. For example, anthroposophic parents seeing link to government and experiencing a willingness to understand perspectives.

STRONG EMPIRICAL UNDERSTANDING DIRECTLY GUIDING RESPONSE: The qualitative research used was a major strength. It enhanced strong listening and a rich understanding of community perspectives, and the intervention decisions were clearly responsive to this understanding. For example, in the Somali community, there had been a tendency for professionals not discuss autism in relation to the topic of vaccination. TIP encouraged a recognition of this felt need in the community: to address their own knowledge deficit about autism, to understand early signs and to be reassured when children were displaying normal behaviours misjudged as signs of autism. To this extent, the seminars addressed a need in the community and strengthened the capacity of nurses to discuss autism.

Furthermore, the process showed that parents were replacing fear of measles with fear of autism and measles-awareness raising was needed. Here, the information capitalised on those vaccination pathways e.g., concern about measles transmission from Somalia, revising the vaccination decision when travelling, learning of the vaccinating minority and thinking about how to support them. Other lessons from TIP included the need for multiple channels and approaches; peer education, personal stories, champions, and using the oral tradition, not just written information. For example, a seminar with a handful of people attending may seem like a non-success to project staff but it was learnt that after the seminar, the few individuals would go to the community and report what was heard to many others.

NEW WAYS OF SEEING PROBLEMS AND STRENGTHS: One of the most important aspect of the TIP approach was segmenting by behavior. In Sweden this took the form of the categories not vaccinating, partially/delaying vaccination, and fully vaccinating. The project team gained an understanding of what makes people vaccinate in that community which enabled them to better understand the motivations that were unique to that community. TIP also prompted a desire to collect more data on attitudes and demographics of under-vaccinated to signal future areas of focus.

Moving from the formative to intervention phase:

The rationale for beginning an intervention with the Somali community was clear. The paths for distinct and tangible interventions are less clear with the Anthroposophic parents and undocumented migrants, for very different reasons. *However, it was clear that the formative phase in itself enhanced channels and trust for future engagement, sharpened the intervention ideas and even suggested where it might be rash to intervene.* For the Swedish team, questions remain about how to make more interventions happen, get funded, evaluated and sustained. There is a lack of funding and technical capacity for intervention follow-up and evaluation at present and there may have been a reliance on pro-active technical support from WHO that matched the level of intensity of the formative phase:

“We thought they would bring a toolbox of what we may decide to implement in terms of interventions – but we had to do the work ourselves.”

This suggests that there is a tension for WHO between bringing the impetus and profile and the intensive technical support to help facilitate a TIP process but creating a level of dependency that might be difficult to sustain.

In addition, there was discussion about the way that the academic qualitative work interacts with the pragmatic and highly structured TIP process with pre-existing conceptual maps. It was concluded that TIP was ideal as a ‘top and tail’ but the qualitative research can’t be circumscribed or it will lose its validity and strength as a method.

Recommendations for the regional TIP evaluation

- Make the core guide shorter and practical. In it, include optional links to more detailed guidance on different phases of the TIP process in appendices or web resources. In the core guide, retain the focus on a conceptual map, behavioural structuring and intervention grounded in community perspective;
- Expand the intention of the TIP process from diagnosis of problems and suggested solutions to encourage piloting and evaluating solutions emerging. The Swedish results suggest that carrying through to intervention stages deepened the sense of community engagement and understanding of community needs. The same qualitative data collection techniques applied to the evaluation phase might reveal new demand barriers and suggest further interventions, thus making TIP a cyclical process for continuous improvement as long as services choose to invest in this approach. ;
- Select and design interventions based on feasibility, potential effectiveness, and ability to evaluate
- Where possible, involve community members in the research, implementation and evaluation phases to serve as cultural mediators for tailoring services appropriately.
- Design TIP methodology in a way to limit reliance on technical support or specific individuals from WHO beyond an initial facilitation phase. Establish a community of practice to enable peer learning and support.
- Provide ideas for interventions from immunization or related fields to draw from while avoiding ready-made ‘fit-for-purpose’ solutions;
- Compact or less resource intensive national TIP could look like this:
 - Shorter document
 - Reference group only (bare minimum)
 - Student project

- Embedding community member in health department - eg, internship?

Country recommendations

Engage university experts in the evaluation of the interventions implemented in the Somali community to document impact, using relevant and realistic process and impact measures, for example through masters thesis projects.

Seek resources to continue the process of community engagement. As the Swedish TIP showed, these can evolve to become 'small steps' interventions in themselves. For example, it may be feasible to request periodic meeting with the anthroposophic parent community to provide feedback on the TIP project and a venue to discuss child health issues more generally. Form community reference groups and meet with them periodically to discuss ongoing approaches. Document the results from these interactions, since they may form the basis for new interventions or informing analysis of previous formative work.

Annex 5. TIP evaluation mission report, United Kingdom

TIP evaluation mission report

United Kingdom

14-16 September 2016

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Executive summary

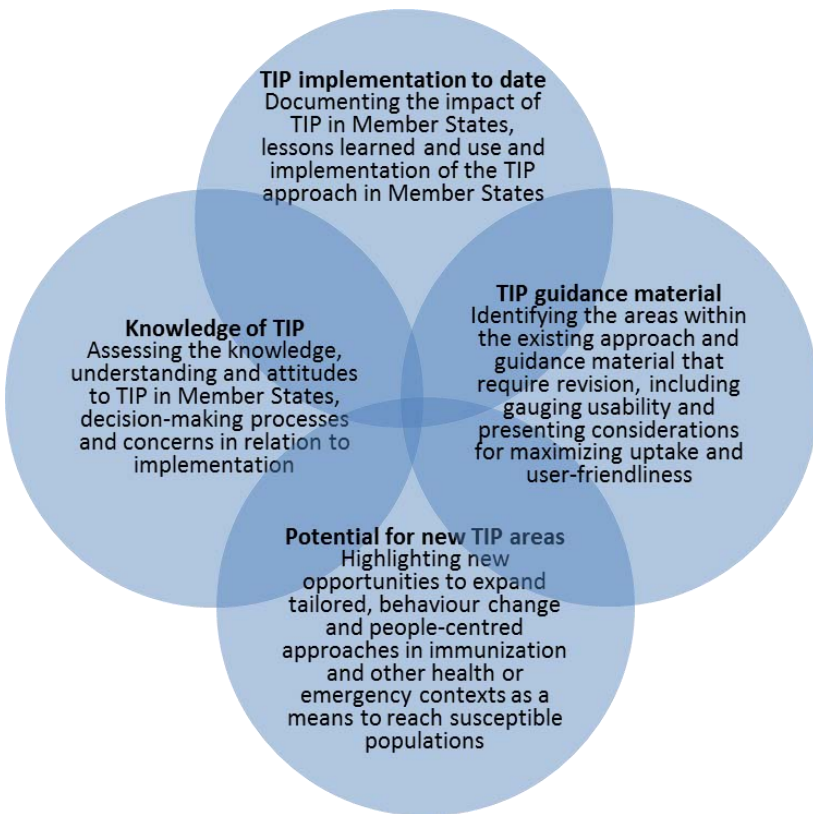
On 14-16 September 2016 a mission was undertaken to London, United Kingdom (UK) to evaluate the *Tailoring Immunization Programme* (TIP) project in the UK with the aim to summarize lessons learned, assess the possible impact of the regional TIP project and prepare recommendations regarding the further use and development of the TIP tool and approach. Key conclusions include the following:

- The UK TIP process was initiated to explore reasons for sub optimal uptake and make recommendations to commissioners and providers to increase vaccination uptake in the ultraorthodox Charedi Jewish community in North London.
- The behavioural insights and people-centred approach offered by the TIP was new in the UK public health/immunization setting, and its value added seems to be highly recognized at all levels, including in the target community and among decision-makers.
- The technical support provided by WHO/EURO, although modest when compared to other national TIP projects, was valued and appreciated; in particular the participation in stakeholder and community meetings, the Copenhagen training workshop and the technical support offered in finalizing the report and segmenting target groups.
- The TIP tool was not considered very user-friendly, but the step-wise approach it offered was appreciated and guided the process.
- For many reasons (including unforeseen reasons within the TIP team) the project lasted almost 3 years, far longer than the originally intended 6 months. Ongoing structural reforms in the UK health systems have posed a number of barriers in the TIP process and seemingly continue to do so in the implementation of the TIP recommendations.
- The outcome of the UK TIP project is a report with recommendations to be used for advocacy, which was launched in December 2016. Specific tailored interventions are to be designed, monitored and evaluated at local levels. It is worth noting in this regard that the document seems to be generally perceived as a robust and important, and actions are reportedly already being taken to address the identified needs. It is also expected by most stakeholders that the TIP process will lead to an increase in funding for vaccination services in the Charedi community.
- Still, at this stage it is not possible to assess the possible long-term impact of the UK TIP project. For any longer-term evaluation of the impact of the UK TIP, clear objectives with indicators have to be set in the design of the interventions suggested in the TIP report.
- As a sign of the recognition that the project receives, it should be noted that additional TIP projects are planned to be initiated with other susceptible population groups in London.

Introduction

Sub-optimal vaccination coverage threatens to jeopardize progress towards disease elimination and allow diseases, such as diphtheria and pertussis to re-emerge in the European Region. Drawing on the medical humanities, social sciences, ethnographic research techniques and behavioural insights method, the WHO Regional Office for Europe in 2013 developed the *Guide to Tailoring Immunization Programmes (TIP)*. The TIP tool and approach offered Member States a process through which to identify susceptible groups, diagnose health seeking behaviour barriers and motivators, segment the population according to behavioural determinants and to go forward in designing a tailored intervention to maximize benefits and minimize barriers to vaccination.

To explore the potential bottom-line health impact of this tool and approach and to take stock of its use and implementation in Member States with a view to recommending the next phase of this work, a regional-level external review is conducted in 2016. Focus areas of the evaluation are:



Evaluation mission to the United Kingdom (UK), 14-16 September 2016

As part of this evaluation, missions are conducted to TIP-implementing Member States in the WHO European Region, including to the UK. The mission team comprised Everold Hosein, independent consultant, as an external evaluator and Katrine Bach Habersaat, WHO Regional Office for Europe, as a coordinator and observer. This report presents the conclusions and recommendations from this mission.

The aim of the evaluation mission was to summarize TIP-related actions taken and lessons learned, prepare conclusions concerning the potential impact of the TIP, and prepare recommendations concerning the further development of the regional TIP tool and approach.

A series of meetings and interviews were conducted to explore the use, usefulness and implementation of the TIP tool and approach in the UK and assess the potential health impact of the TIP.

Overview of stakeholders met

- Louise Letley, Public Health England (PHE)
- Rehana Ahmed, National Health Services (NHS) England
- Pauline Paterson, London School of Hygiene and Tropical Medicine
- Rabbi Pinter, Charedi community leader
- Sarah Weiss, Interlink Foundation
- Gitit Rottenberg, Jewish Maternity Organization and Mothers in Mind
- Laurence Blumberg, Community General Practitioner
- Catherine Heffernan, Principal Adviser for Commissioning, Immunisations and Vaccination Services
- An extended telephone interview (prior to the field mission) was held with Vanessa Rew, Nurse Consultant, Public Health England

In addition, one person was interviewed concerning the UK Tailoring Antimicrobial resistance Programmes (TAP) project which was patterned in part on the TIP approach:

- Adeola Agbebiyi, AMR Team, Public Health England

Overview of reports and documents reviewed

- “Tailoring Immunisation Programmes: Charedi Community, London Borough of Hackney”. Report of Work conducted by: Vanessa Rew, Louise Letley, Maria Saavedra-Campos, Sarah Addiman, Neville Verlander, PHE ; Rehana Ahmed, NHS England; Nalini Iyanger, SpR Public Health; Dr Pauline Paterson and Dr Tracey Chantler, London School of Hygiene & Tropical Medicine; Katrine Bach Habersaat, WHO Regional Office for Europe.
- “Measles in Hackney and the Charedi community, 2006 – 2013”, by Maria Saavedra-Campos, Public Health England, January 2016.
- Letter from Vanessa Rew, Nurse Consultant/Public Health England to General Practitioners to Participate in Study, April 2015. Letter Subject: “Seeking your practice’s engagement: Investigating barriers and facilitators relating to immunisation within the Charedi community”.
- London TIP Questionnaire: “Please tell us about children’s immunisation in your community” - Exploring factors that encourage or prevent you from immunising your children. Public Health UK and NHS England.

- Partner's Meeting Programme: Tailoring immunisations for the Charedi community, London: July 8th, 2014 - Agenda
- Invitation Letter - 19 June 2014 – to invited participants to first partners meeting re. "Tailoring Immunisation Programmes – The Charedi community Partners Meeting 8 July 2014, Hackney "
- Protocol June 2016 for Study Title: "Parental views of the childhood immunisation programme in the London Charedi orthodox Jewish Community: An in-depth qualitative analysis" by Principal Investigators: Dr Pauline Paterson, The Vaccine Confidence Project, Department of Infectious Disease Epidemiology, Faculty of Epidemiology and Population Health, London School of Hygiene & Tropical Medicine (LSHTM), Vanessa Rew, North East & North Central London, Health Protection Team, Public Health England (PHE); and Co-investigators: Dr Heidi Larson, The Vaccine Confidence Project, Department of Infectious Disease Epidemiology, Faculty of Epidemiology and Population Health, LSHTM; Dr Tracey Chantler, Department of Global Health and Development, Faculty of Public Health and Policy, LSHTM Sponsor: London School of Hygiene & Tropical Medicine
- Pilot Report on "Mothers Health Support Project October 2015-March 2016", by Interlink – Orthodox Jewish Voluntary Action, Maternity Trust, Beis Brucha, funded and supported by NHS Foundation Trust.

Please note:

At the time of the evaluation the final report of the qualitative research had not been finalized and launched, and conclusions in this regard are based on interviews with the TIP project team and the lead researcher conducting the TIP qualitative research.

Background: Situation

Northeast London is home to the largest Charedi community in Europe, with over 25 000 people. The Charedi are a community of strictly observant Orthodox Jews. A high birth rate is leading to rapid expansion of the community with a high proportion of children placing an increased demand on health services. Immunization coverage is known to be sub-optimal to ensure herd immunity for several vaccine-preventable infectious diseases including measles. As such, recurrent outbreaks of measles have caused preventable ill health and increased pressure on health services.

In an attempt to better understand reasons for current suboptimal coverage of children's immunizations within this community, Public Health England (PHE) in partnership with the community, immunization service commissioners (NHS England) and health providers conducted a WHO TIP project during 2014-2016. The aim was to provide evidence-informed recommendations to immunization commissioners and providers to enable services to be better tailored to the needs of the community.

Background: The choice and use of the TIP methodology and materials

The TIP was basically chosen because it was available, had the WHO imprimatur, defined a step-wise approach and offered guidance on how to work with behavioural insights and community engagement, a new approach in this setting which seemed attractive to the project coordinators. They heard about the TIP by coincidence at a meeting, and did not seek or consider any other tools as TIP was seen as what they needed.

The technical support provided by WHO, although modest when compared to other national TIP projects, was valued and appreciated; in particular WHO's participation in stakeholder and community meetings, a TIP training workshop organized in Copenhagen in 2014 and technical support offered in finalizing the report and segmenting target groups. It was the general understanding (from all stakeholders) that this external presence with the WHO label helped improve trust among the stakeholders (as this is not the first time someone approached the Charedi community on a health issue).

The fact that WHO had developed the tool was perceived as a proof of quality; by implementers as they decided to use the tool, and later by decision-makers and others whose support was needed. This was said to be one of the reasons why TIP coordinators were allowed by their managers to engage in the project and dedicate considerable working hours on it.

The TIP guidebook in itself was not considered very user-friendly, but the illustrated step-wise illustration was referred to throughout the process.

Background: The TIP process/project

To help define the research problem (one key aspect of the TIP process) the current immunization service support within the community was mapped; a literature review was undertaken; relevant surveillance and outbreak data was examined; and two stakeholder meetings were held. This resulted in a situation analysis, defining potential barriers to immunization in the community. These were further explored in the formative research phase of the project, which included further analysis of surveillance and outbreak data; a questionnaire survey of Charedi parents; as well as in depth interviews with parents and key informants.

The issues impacting on immunization uptake highlighted from the work undertaken was then analysed to explore behavioural patterns and grouped according to whether they were environmental, social/community or individual. Parents were grouped according to their beliefs/behaviours to make sure that solutions could be tailored to meet the needs of different sections of the community.

A feedback meeting with community members, a senior Rabbi, NHS commissioners and providers, general practice staff, PHE, WHO and Government was held to discuss the findings. Participants were asked to suggest and prioritise possible solutions. The behavioural pattern analysis and feedback meeting output enabled four broad categories of parents to be identified: 1) the concerned mother, 2) the culturally and religiously adherent mother, 3) the busy mother, 4) the mother who is sceptical of health authorities.

As a result of this process, a report with clear recommendations to further tailor and protect commissioning and provision of children's immunization and health protection services for the community was developed and launched in December 2016.

As part of this report there are *recommendations* to ensure monitoring and evaluation mechanisms for all recommended activities. But it will not be up to the TIP project team to develop, implement and monitor *intervention activities*, and as such the TIP report is an advocacy document. It is worth noting in this regard that the document seems to be generally perceived as a robust and important, and actions are reportedly already being taken to address the identified needs. It is also expected by most stakeholders that the TIP process will lead to an increase in funding for vaccination services in the Charedi community.

As regards project coordination and implementation, the original intention was to implement a TIP in 6 months. The process ended up taking almost 3 years. Partly for unforeseen personal circumstances within the TIP team, partly because all available resources within the local PHE team were allocated to Ebola response. However, internal processes (e.g. research approval processes) also took much longer than anticipated.

A group of three coordinators were involved, representing different public health institutions. The main coordinator was allowed to work for 1 day a week on the TIP and did so during a longer period of time. They report that the workload related to stakeholder engagement, planning and discussing the process and project elements, organizing stakeholder meetings, finding/tracking data, obtaining research committee approval etc. was much more burdensome than they had anticipated.

The project group was successful in ensuring broad stakeholder engagement, including community leader and representatives, service providers, community nurse, NHS, PHE, research capacity within PHE – as well as senior/decision-maker level stakeholders to some extent (if only to get their attention more than their

active engagement). It is an important lesson learned that the engagement of different government/state institutions on health is crucial, especially in times of change and health reform.

Additional TIP projects are now planned to be initiated with other susceptible population groups in London.

Conclusions: TIP implementation and impact in the UK

At this stage it is not possible to assess the possible long-term impact of the UK TIP project or even the short-term impact of increasing the uptake of measles immunisation. For any longer-term evaluation of the impact of the UK TIP, clear objectives with indicators have to be set in the design of the interventions emerging from the recommendations of the final report. As a sign of the recognition that the project receives, it should be noted that additional TIP projects are planned to be initiated with other susceptible population groups in London.

It is clear from the mission interviews that the stakeholder meetings added considerable value, as they ensured access to the community and broad buy-in through engagement of a range of stakeholders. They also provided a common target as the atmosphere reportedly changed from quarrelling to agreeing on a process towards a goal. This is seen as an achievement with this community where health projects in the past have failed in ensuring community engagement. The outcome of the first stakeholder meeting was a common SWOT analysis which set the course for the process, identified the project elements and informed the research.

As for the value of the other specific TIP elements, the process to review old patient files did not add much value, as there were too many unanswered questions. This was one of the elements that led the TIP project team to realize that they needed a qualitative element. The questionnaire survey further explored the outcome of the SWOT and added robustness to the quality of the report; it also ensured the access to qualitative interview stakeholders. The qualitative interviews (10 target groups, 10 informants) explored the assumptions from the SWOT and quantitative questionnaire. However, while the TIP report has been launched and includes some outcome of the qualitative research, the actual report from the qualitative work still had not been finalized at the time of this evaluation.

Many recommendations could (more or less) have been developed based on the input of community stakeholders and a very strong situation analysis and SWOT at the early phases of the project (which with some adjustment was confirmed in the subsequent quantitative and qualitative research). Still, it was the *complete* TIP project which was successful in bridging community insights and knowledge to institutional acceptance and willingness to act.

The project is different from other TIP projects as the outcome is a range of recommendations to be used for advocacy, and impact will depend on the success of this advocacy. Some initial indications of success would be the general acknowledgement among all stakeholders met (including the ones who will need to implement and allocate funding for the recommendations) of the report and the TIP approach. It should also be noted that the TIP team have been successful in presenting strong recommendations with considerable implications (e.g. in terms of cost) without any negative reactions (so far) – this in itself is considered an achievement.

Recommendations for the regional TIP evaluation

- The UK TIP components were successfully implemented with limited technical assistance from WHO. However, the team expressed that they would have benefitted from more sparring, from expert and peers, during the process. It should be considered to establish a technical assistance group of experts, potentially also with peer support from countries that already conducted a TIP.
- TIP training workshops should be conducted on a regular basis to ensure a common understanding of the TIP approach. It should be considered whether these could be implemented at national levels as well as regional.
- It should be considered to include more guidance and direction on the research process itself in future TIP materials.
- New TIP materials should provide some directions on internal processes, e.g. research approval processes or ethical approval, as this may not be well-known by stakeholders.
- A realistic time frame should be aimed for in future national TIP projects, but it should be discussed how a TIP process can be implemented in a shorter time frame.
- If TIP coordinators are not the intervention implementers, it is critical to include these implementers as active participants in the planning process from the very beginning.
- The community workshops and the stakeholder engagement seem to be a critical and very valuable element of the TIP, and this should be reflected in future materials. The common knowledge that different stakeholders represent alone can lead to a strong and precise situation analysis.
- The research element, however, adds robustness which is critical for decision-maker and implementer buy-in.
- It was clear that there is a need for more user-friendly TIP guidance materials. Two suggestions for additional materials were made: 1) a short video presentation of the TIP process for presentations and YouTube; 2) a one-pager TIP introduction for decision-makers.

Country recommendations

The UK TIP report offers 28 final recommendations: 5 for Commissioners, 15 for Providers, 3 for Health Protection Services and 5 for the Community.

If at all possible, it is recommended to

- work together with key stakeholders to develop an implementation plan for ensuring the implementation of the recommended actions;
- monitor the implementation of these recommendations;
- ensure an evaluation mechanism to measure the intended ultimate outcome: optimal uptake of childhood immunization.