Common Approach for REfugees and other migrants' health

REPORT ON THE

SURVEY ON IMMUNIZATION OFFER TARGETING NEWLY ARRIVED MIGRANTS

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Abbreviations

AP Autonomous Province

BCG Bacillus Calmette-Guérin

CARA *Centro di Accoglienza Richiedenti Asilo:* Reception Centre for asylum seekers (in Italy)

CAS *Centro di Accoglienza Straordinaria*: Extraordinary holding centre (in Italy)

CDA *Centro di Accoglienza*: holding centre (in italy)

CIE *Centro di Identificazione ed Espulsione*: Centre for Identification and expulsion (in italy)

CPSA Centre for first aid and assistance (in Italy)

DTP Diphtheria-Tetanus-Pertussis

DTaP Diphtheria-Tetanus-(acellular) Pertussis

Tdap Diphtheria-Tetanus-(acellular) Pertussis, with reduced concentrations of diphtheria and pertussis toxoids.

GC Governmental Centre

GP General Practitioner

HAV Hepatitis A Virus

HBV Hepatitis B Virus

HCV Hepatitis C Virus

HCW Health Care Workers

HepB Hepatitis B

Hib Haemophilus Influenzae type B

IPV Inactivated Polio Vaccine

LHU Local Health Unit

MMR Measles-Mumps-Rubella

MoH Ministry of Health

NGO Non-Governmental Organization

NIP National Immunization Plan

PCV Pneumococcal conjugate vaccine

PHC Primary Health Care

SOP Standard Operative Procedure

SPRAR *Sistema di Protezione per Richiedenti Asilo e Rifugiati:* Protection System for Asylum Seekers and Refugees (in Italy)

VPD Vaccine Preventable Disease

WHO World Health Organization

Countries

GR	Greece
HR	Croatia
IT	Italy
MT	Malta
PT	Portugal
SI	Slovenia

Executive Summary

The unprecedented flow of newly arrived migrants to European coasts of the last three years places Europe in front of a great public health challenge. One of the risks to avoid is the outbreak of vaccine preventable diseases, that have to be hindered by raising immunization coverage among migrants at risk. Since vaccination schedules often need several months to be completed, an integrated and cooperative approach to this challenge is essential. Tracking immunization data of migrant population and exchange data on administered vaccines among countries would allow appropriately planning immunization series and avoiding duplication of vaccination.

We conducted a survey on immunization offer targeting newly arrived migrants in the CARE project participating countries (Croatia, Greece, Italy, Malta and Slovenia) and Portugal. At national level, a survey has been conducted to investigate the national policies concerning vaccination in migrants. At local level the same survey was adapted for migrant centres and health centres, to assess the practices that are truly carried out. The survey covered several aspects concerning the legal framework supporting immunization practice, vaccination strategies targeting migrant children and adults, vaccine administration record and transmission.

All six national responders filled the questionnaire and provided information on vaccination policies. At local level, 170 local questionnaires were filled out from 5 countries: 4 in Croatia, 6 in Greece, 157 in Italy, 1 in Malta and 2 in Slovenia.

Although all countries provide immunization for newly arrived migrant children, only in four of them all vaccination included in the NIP are offered. Four countries provide some vaccinations also to newly arrived migrant adults, but with a large heterogeneity in vaccination offer, mainly following prioritization in certain conditions. Priority vaccines (polio and MMR) and site of delivery (mainly at community level) are in line with WHO indications. When vaccination cycle requires more than 1 dose, in some countries the first dose is delivered at holding centres, and the other doses at community level.

Only one country reported that migrants are informed on their vaccination needs and dedicated health-social staff facilitate their access to vaccination at the community level.

Vaccination are always recorded, although often only on individual record delivered to migrants, and the situation on information transmission is diverse.

Standardization of regulations in the country and mechanisms of exchanging data on administered vaccines also among countries is essential in order to improve the vaccination offer and ensure an adequate immunization coverage.

1. Introduction

1.1. Rationale

During 2016, 511,371 people have been traveling to Europe through various transit routes across Africa, Asia and the Middle East, and in 2015 the number of people who arrived in Europe was estimated 1,822,177 [1]. The unprecedented mass population movement poses a public health challenge to the European receiving countries. The lack of sufficient water, inadequate shelter and sanitation conditions that migrants face during the journey, alongside with the psychological stress of fleeing their home, increase the risks for acquiring communicable diseases during the journey and in the overcrowded migrant holding centres. Furthermore, migrants often come from countries where civil wars and other events limit access to immunization services, especially for children who cannot have been immunized previously.

A certain degree of susceptibility is still present among resident and mobile individuals in the host countries; coverage is still suboptimal in some areas and varies among countries and inside the same country. Most outbreaks of vaccine-preventable diseases occur in the Region independently of refugee and migrant population movement. The recent outbreaks of measles in many European countries indicate that adolescents and young adults are particularly susceptible. There is also a potential risk for a polio outbreak in the WHO Euro-Region. The rapid influx of large numbers of unvaccinated children would therefore only increase existing immunity gaps.

In November 2015, at the pick of the large influx of migrants through the Central Mediterranean route, the Western Balkan route and the Eastern Mediterranean route, WHO-UNHCR-UNICEF published the "Joint Statement on general principles on vaccination of refugees, asylum seekers and migrants" [2] and ECDC the technical document "Infectious diseases of specific relevance to newly arrived migrants in the EU" [3]. Both documents support the improvement of vaccination offer for newly arrived migrants, and state some principles to guide this process. In particular, vaccination status for all migrants should be assessed using the available documentation, in order to avoid unnecessary vaccination, and supplementary vaccination should be offered to those unprotected, according to the national immunization guidelines of each country.

If no documentation exists, the individual should be considered unvaccinated and vaccinations should be administered within 14 days of his/her arrival, especially for the priority vaccines, that the Joint Statement indicates as MMR and polio vaccines. ECDC technical document considers priority vaccines those against measles, rubella, diphtheria, tetanus, pertussis, polio, Hib (< 6 years) and hepatitis B. Additional vaccines should be considered for protection against meningococcus, varicella, pneumococcus and influenza, depending on living conditions, season and epidemiological situation.

The Joint Statement specifies, though, that vaccination is not recommended at border crossing unless there is an outbreak. After the administration of the first dose at holding centre where migrants are hosted, the vaccine series can be continued or supplemented later, at the place of long term residence.

According to the Joint Statement "the provision of vaccines should be carried out in an equitable manner with a systematic, sustainable, non-stigmatizing approach". This challenge requires cooperation among different institutions and countries of origin, transit and destination, since more than one vaccine dose is often needed to get a complete individual immunization and intervals among doses can be of months. Tracking immunization data of migrant population and exchange data on administered vaccines among countries would allow appropriately planning immunization series and avoiding duplication of vaccination.

1.2. Objectives

The aim of this survey was to assess the current policies and practices in vaccination offer targeting newly arrived migrants in different European countries (Croatia, Greece, Italy, Malta, Portugal and Slovenia). The specific objectives were:

- to assess the national policies in vaccination offer targeting newly arrived migrants;
- to describe how national immunization policies are locally applied in different types of migrant detention/accommodation centres or within the community.

1.3. Structure of this report

This report describes the **survey on immunization offer targeting newly arrived migrants**. Following a general overview of the methodology used for carry on the survey (§2), a description of the profile of respondents (§ 3) and the results of the survey at national level with comparison among the six participating countries (§ 4) are given.

A short summary is provided for the survey at local level (§ 5) followed by the single country profiles were details are provided on the survey at local level in comparison with results at national level (§ 6-10).

2. Methodology

A cross-sectional survey has been conducted in different European countries in the period April 2016 – March 2017.
The survey has been conducted at different levels:

- national level ("theory"), in order to explore the national policies in vaccination offer targeting newly arrived migrants
- local level ("practice"), in order to explore how national immunization policies are locally applied in different types of migrant detention/accommodation centres or in the community (e.g. public vaccination services, primary care services, GPs, pediatricians).

2.1. Identification of participating centres and contact points

The survey has been conducted in 6 European countries: the five WP5 CARE partners (Croatia, Greece, Italy, Malta and Slovenia) plus Portugal.

A national contact point and local contact points have been identified in each country for filling the questionnaires.

At national level, the request was for an expert working with vaccination or migrant health (or collaboration of both experts) for filling the questionnaire.

At local level, one or more migrant reception centres and public health or primary care local services were selected in each country. The number and type of centres/services were identified depending on the local organization of the health system and the migrants' accommodation and assistance. For each centre/service a contact point was identified for the local questionnaire (either the responsible of the centre/service or a doctor who provides health care).

2.2. Development of online questionnaires

Three electronic questionnaires (one at national level and two at local level, one for migrant centres and one for health centres) have been developed using an online software, SurveyMonkey (http://it.surveymonkey.com/home.aspx). Questions were closed-ended, with optional space for input of free text. Data have been entered directly on-line.

The questionnaires covered the following aspects:

a) legal framework/regulations supporting vaccination offer to migrants
b) assessment of migrant vaccination status
c) target groups for vaccination (type of migrants, age groups, risk groups)
d) vaccination offered to newly arrived migrants (children, adolescents and adults)
e) sites for vaccination delivery
f) availability of Standard Operative Procedures for migrants' immunization
g) procedures to guarantee the access of migrants to vaccination
h) recording of data on administered vaccines and their transmission to other centres or national/international institutions
i) experiences and challenges

It was possible to send per email or provide the link of files related to protocol, procedures and other useful documents.

2.3. Pilot of the collection tools

During the first week of October 2016, the preliminary version of the questionnaires was tested. The national questionnaire was tested in Croatia, Italy and Slovenia; the local questionnaire was tested in Malta and Slovenia. After piloting, the questionnaire was modified accordingly.

2.4. Launch of the survey and data collection

Each identified contact point received an email with a link to the online questionnaire when the survey was launched.

The national survey was launched in October and a reminder was sent on 10th November. The local survey was launched on 30th November 2016 both for migrant centres and for health centres and a reminder has been sent on 14th December.
The national survey remained available for compilation until December 2016; the local one until February 2017.

National contact points were also asked to provide the link or send by email national documents related to immunization strategies targeting newly arrived migrants (Ministerial decree or other legally binding documents, Recommendations, Guidelines, Technical guidance or other national documents).

2.5. Descriptive analysis of the results

A descriptive analysis of results has been conducted, including comparison of current policies in vaccination offer among the participating countries, and are presented in this report. Country profiles containing results from national and local survey have been produced and presented in the second part of this report, except for Portugal that participated to the national survey only.

3. Profile of the responders

For what concerns the survey at national level, all 6 countries (GR, HR, IT, MT, PT, SI) responded to the survey, and completed the whole questionnaire. In all countries but PT the responder was an epidemiologist or Public Health expert. In Portugal the questionnaire was filled by a Senior Officer of International Relations.

Overall 170 questionnaires were filled out from 5 countries (GR, HR, IT, MT, SI): 4 in Croatia, 6 in Greece, 157 in Italy, 1 in Malta and 2 in Slovenia. In Italy, 121 questionnaires were filled out by personnel of migrant reception centres, and among these 28 were health professionals. Out of Italy, five questionnaires were filled out by health staff of migrant reception centres (2 physicians in HR, 2 officers of NGOs in GR, 1 epidemiologist in SI). 44 questionnaires were completed by staff of health centres (2 HR, 4 GR, 36 IT, 1 MT and 1 SI).

4. Survey at National level: comparative results

4.1. General overview of migrants in the countries

The overall number of migrants (including irregular, refugees and asylum seekers) arrived in 2016 varies among the responding countries (Table 1), from more than 181.436 in Italy, to 1308 in Slovenia.

Table 1. Number of migrants arrived in 2016

Country	Number of migrants arrived in the country	data refer to (month)
Croatia	**2,200 (only asylum seekers)[4]**	January-December
Greece	**173,000**	January-December
Italy	**181,436**	January-December
Malta	**1,700 (only asylum seekers)[4]**	January-December
Portugal	**1,600**	January-September
Slovenia	**1,308 (only asylum seekers)[4]**	January-December

4.2. Legal framework/regulations supporting vaccination offer to migrants

All 6 responding countries (GR, HR, IT, MT, PT, SI) indicated that there is a **national regulation or a legal framework** supporting immunization of migrants available in their countries. For HR, IT, MT, SI there is a national regulation/legal framework specifically established for migrants' immunization, while for GR and PT it is part of the regulation/legal framework for the National Immunization Plan (NIP).

Table 2 provides further information on the available documents as well as the related link provided by the responders. All the documents available at the corresponding links are laws in original language.

Table 2. National documents used elaborating policy

Country	Type of document	Year	Link
Croatia	Law	2008	http://narodne-novine.nn.hr/clanci/sluzbeni/2008_04_39_1346.html
Greece	NIP		
Italy*	Law	1998	http://www.camera.it/parlam/leggi/98040l.htm
Malta	Recommendation	2012	
Portugal	NIP	2017	https://www.dgs.pt/documentos-e-publicacoes/programa-nacional-de-vacinacao-2017-pdf.aspx
Slovenia	Law	2016	http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4911**

*In 1993 a technical document had already been published by Ministry of Health on vaccinations for migrant 0-14 years of age
**The International Protection Act of 2016 is the base for all other regulations and acts which specify all details about the vaccination policy for asylum seekers

All country responders claimed that immunization policies targeting migrants are **homogeneous in the whole country**. Italy, though, specified that the uniformity required by the national law is hindered by the decentralized health system and by the fact that some regions are much more involved in migration than others.

Portugal is the only country that has also drawn up a **regional regulation** or legal framework supporting immunization of migrants, it is part of the regional regulation/legal framework for vaccinations, and it can be found in all regions.

4.3. Immunization strategies targeting migrants - children/adolescents

4.3.1. Target population

All six countries indicated that they offer vaccination to migrants, with some differences in the target groups. Detailed information by country are showed in Table 3.

Greece answered positively to the question and stated that, at the time of survey, vaccinations were not routinely offered to migrants and were offered only during vaccination campaigns, but did not provided any specification to define the target group.

All responding countries provided vaccinations for asylum seekers, 4 of them (HR, IT, MT, PT) also for refugees. IT, MT and PT offer vaccinations also to unaccompanied minors and irregular migrants.

Age range varies from 0-15 years (IT and GR), to 0-18 years (HR, PT, SI). Malta has a range of 0-16 years.

Particular attention is focused on certain risk conditions in IT and MT: groups at risk for specific diseases and health conditions according to the NIP in Italy (same health conditions of the general population); and children/adolescents coming from Sub-Saharan Africa and war-torn countries in Malta (table 3).

Table 3. Immunization offer to migrant children/adolescents: target groups

	Target by type of migrant				**Target by age**	**Target by risk conditions (e.g. health conditions, country of origin)**
	unaccom-panied minors	**irregular migrants**	**asylum seekers**	**refugees**	**Age Limit (years)**	
Croatia					0-18	
Greece	/	/	/	/	0-15	Performed during vaccination campaigns, no routine vaccination*
Italy					0-15	Specific diseases and health conditions defined in the NIP
Malta					0-16	Specific attention to certain countries of origin: Sub-Saharan Africa, War-torn countries
Portugal					0-18	
Slovenia					0-18	

*The vaccination campaigns were performed mainly by 3 major NGOs (but also by public services) and coordinated by the Ministry of Health.

4.3.2. Check of the immunization status

All countries affirmed that migrant children and adolescents are checked for immunization status through anamnesis or check of immunization cards, although there are differences among the countries. Italy is the only country in which immunization status is checked at entry level, as well as at holding level (e.g. migration centre) and community level (by the general practitioner, pediatricians or vaccination service). HR and MT check it in holding centres; SI in holding centres and community level; GR and PT check it only at community level.

Four responding countries (HR, IT, PT, SI) answered they check the immunization status for all vaccines included in NIP (in line with the vaccination offer, see below). Malta specified they check the immunization status only for poliovirus, diphtheria, tetanus, measles, mumps, rubella and BCG. Italy is the only country that indicated, for some VPDs, the testing of immunity if the migrants have no immunization card (see table 4 for more details).

No limit of age for checking immunization status has been reported by participating countries.

Table 4. Check of the immunization status

	Immuniza-tion status checked	Where			Which vaccines	Laboratory tested?	Target by risk conditions
		Entry level	holding level	Commu-nity level			
Croatia	Yes		x	x	All included in NIP	No	
Greece	Yes			x		No	During vaccination campaign*
Italy	Yes	x	x	x	All included in NIP	Yes**	Specific attention to migrants from countries at endemic risk of polio reintroduction
Malta	Yes		x		Polio, diphtheria, tetanus, measles, mumps, rubella, BCG	No	Specific attention to migrants coming from Sub-Saharan Africa, War-torn countries
Portugal	Yes			x	All included in NIP	No	
Slovenia	Yes		x	x	All included in NIP	No	

*Performed in all reception centres as well as in urban settings

**For some VPD (HBV, tetanus)

4.3.3. Vaccination offer

Four countries (HR, IT, PT, SI) reported that migrant children and adolescents receive all the vaccination included in the NIP appropriate for age, while Malta and Greece offered only some vaccinations to this population (Table 5).

Table 5. Vaccination offer to migrant children/adolescents susceptible or without documented immunization status

	Vaccines					
	DTP	IPV	Hib	HBV	MMR	PCV
Greece*	x	x	x	x	x	x
Malta	x	x	x		x	
Croatia	All the vaccinations included in the NIP appropriate for age					
Italy						
Portugal						
Slovenia						

*The plan of the vaccination campaigns included priority vaccines -one dose of hexavalent vaccine (DTP-IPV-HepB- Hib) and one dose of conjugate pneumococcal vaccine (PCV) for children <5 years of age; one dose of MMR for children 1 to 15 years. After the completion of the campaigns which have given one dose of the above vaccines, the integration of vaccination with National Immunization Program vaccines into routine primary care services is planned - to be carried out by public primary care services as well as major NGOs.

In four countries (HR, GR, IT, MT) some vaccinations are considered a priority: in particular, vaccination against Poliovirus is a priority for all four responding countries, followed by MMR and Tetanus, priority for 3 countries (HR, GR, IT) and Diphtheria and Pertussis, priority for two countries (HR, GR) (see Table 6 for detailed information).

Table 6. Prioritized vaccinations

Are some vaccination considered a priority?	Countries	Total
No	SI, PT	2
Yes	HR, GR, IT, MT	4
Hepatitis B		
Poliovirus	HR, GR, IT, MT	4
Tetanus	HR, GR, IT	3
Diphtheria	HR, GR	2
Pertussis	HR, GR	2
Measles-Mumps-Rubella	HR, GR, IT	3
Measles		
Rubella		
Mumps		
Hepatitis A		
Haemophilus influenzae type b		
BCG	GR	1
Varicella		
Influenza		
Pneumococcal	GR	1
Meningococcal		
HPV		
Other		

In all countries the vaccination scheme for migrant children is identical to that applied to natives.

Vaccine administration is organized in different ways in the six countries. In four countries (HR, GR, IT, MT) vaccines are delivered both at holding level and community level. In Croatia, school children are usually vaccinated at the school medicine service within public health institute or, less commonly, in schools, while the

others at holding centers. In Greece, the vaccination campaigns are held at holding centres, but the completion of routine schedule is planned at community level. In Italy, the site of delivery depends on the intensity of flow and length of stay of migrants, on human resources available and on logistic aspects (but the responder did not provide details on these differences). In Malta, the first dose is given at the Migrant Reception Centre and if a course is needed, this is carried out in the community health centres. In Portugal and Slovenia vaccines are delivered only at community level. No country provides vaccinations at entry level (e.g. seaport, airport) (Table 7).

The informed consent is required verbal in five countries (GR, HR, MT, PT, SI). The Italian responder did not know the situation at local level.

Three countries indicated the presence of Standard Operative Procedures (SOPs) (HR, GR, SI). In Greece, these procedures are available in the framework of the vaccination campaign, while in Slovenia, they are available at holding centres and at community level. Aspects covered by these SOPs are reported in Table 7.

Table 7. Information on vaccination delivery

Where are vaccinations delivered	**Countries**	**Total**
At entry level		
At holding level	HR, GR, IT*, MT	4
At community level	HR, GR, IT*, MT, PT, SI	6
Is informed consent for vaccinations requested to migrants (or parents)		
Yes, verbal	HR, GR, MT, PT, SI	5
No		
I don't know	IT	1
Are there national Standard Operative Procedures (SOPs) for immunization practice or for guaranteeing access to immunization of children-adolescent migrants		
No	IT, MT, PT	3
Yes (specified below aspects covered by SOPs)	HR, GR, SI	3
Target groups of vaccinations, Recording of administered vaccines, Information flow from local to regional-national level, procedures of campaign	GR	
Target groups of vaccinations, Logistic of vaccinations' offer, check of migrant immunization status, recording of migrants' immunization status, Recording of administered vaccines	HR, SI	

*Site of delivery depends on the intensity of flow of migrants, length of stay of migrants, human resources, logistic aspects

4.4. Immunization strategies targeting migrants – adults

4.4.1. Target population

Four countries (HR, IT, MT, PT) indicated that they offer vaccination to adults. Croatia affirmed that they offer vaccination to asylum seekers up to 35 years. In Italy and Portugal vaccination is offered to irregular migrants, asylum seekers and refugees, without age specification. In Italy, particular attention is paid to adults coming from polio endemic countries or at risk of reintroduction and migrants with wounds at risk of tetanus.

In Malta, the vaccination offer is provided for irregular migrants and, like children, the attention is focused on adults from Sub-Saharan Africa and war-torn countries.

Greece answered that they still don't offer vaccination to the recent wave of adult migrants, while it was provided to the previously arrived migrants by NGOs. Additionally, Greece affirmed that a program to immunize high risk

(age 60+, pregnant women, etc.) migrants/refugees in camps and urban settings against influenza is being planned and implemented. In Slovenia vaccination to adults is offered only if there is an epidemiological indication.

Detailed information by country is showed in Table 8.

Table 8. Immunization offer to migrant adults: target groups

	Target by type of migrant			Age Limit (years)	Target by risk conditions (e.g. health conditions, country of origin)
	irregular migrants	asylum seekers	refugees		
Croatia				18-35	
Greece	*				Only for influenza vaccine in groups at high risk
Italy				all	Specific attention is paid to: - Adults coming from Polio endemic countries or at risk of reintroduction - Adults with wounds at risk of tetanus
Malta				All**	Specific attention is paid to adults from certain countries of origin: Sub-Saharan Africa, war-torn countries
Portugal				All	Portugal's "catch up" program includes adults (both migrants and natives). This is targeted at tetanus and diphtheria, but also includes measles, rubella and polio
Slovenia	No				The vaccination occurs only if there is an epidemiological indication

*Not for recent wave of migrants/refugees; yes for older waves of migrants

**in Malta minors from 16 to 18 years receive the vaccination offer of adults

4.4.2. Check of the immunization status

Countries that offered vaccination to adults (HR, IT, MT, PT) check for immunization status, through anamnesis or check of immunization cards, for those who belong to target groups. Croatia checks adults up to 35 years for poliomyelitis, diphtheria, tetanus and measles. Italy affirmed that only the immunization status for polio is checked, for those coming from endemic countries or at risk of reintroduction. In Malta, the immunization status for poliomyelitis and tuberculosis is checked, particularly for those from Sub-Saharan and war-torn countries. Portugal indicated a check for all vaccinations included in the NIP.

The place where the immunization status is checked is the same for children and adults in all countries that offer immunization to adults (see table 9 for detailed information).

Like the situation for children, also for adults Italy is the only country that indicated the testing of immunity for HBV and tetanus if migrants have no immunization card (Table 9).

Table 9. Check of the immunization status

	Immuniza-tion status checked	Age limit (Years)	Where			Which vaccines	Laboratory tested?	Specific target groups
			Entry level	holding level	Commu nity level			
Croatia	Yes	18-35		x	x	Polio, measles, tetanus, diphtheria	No	
Greece	No	/					No	
Italy	Yes	/	x	x	x	Polio	Yes*	Polio endemic countries or at risk of reintroduction
Malta	Yes	/		x		Polio, BCG	No	Specific attention to migrants coming from Sub-Saharan Africa, war-torn countries
Portugal	Yes	/			x	All included in NIP	No	
Slovenia	No	/					No	

*For HBV and tetanus, and for screening purpose HCV, TB (performed in some regions although there is no national recommendation)

4.4.3. Vaccination offer (for countries offering vaccination to migrant adults only)

In PT the vaccination offer to migrant adults included all the vaccinations included in the NIP appropriate for age, while the other countries offering vaccinations to adults present some differences. Polio vaccination is offered in all countries (HR, IT, MT) as well as tetanus, although in Italy its offer is limited to people presenting risk conditions like exposed wounds. HR and MT offer also diphtheria vaccine (HR combined Td vaccine). Finally, HR and IT offer the MMR vaccine (Table 10).

Table 10. Vaccination offer to migrant adults susceptible or without documented immunization status

	Vaccines						
	Tetanus	Diphtheria	IPV		Measles	Mumps	Rubella
Croatia	x	x	x		x	x	x
Italy	x*		x		x	x	x
Malta	x	x	x				
Portugal	All the vaccinations included in the NIP appropriate for age**						

*in case of exposed wounds

**Targeted to tetanus and diphtheria, but also includes measles, rubella and polio

In three out of four countries offering vaccination to migrant adults (HR, IT, MT), some vaccinations are considered a priority: vaccination against poliovirus is a priority for all three responding countries, followed by tetanus and MMR (a priority for HR and IT) (Table 11).

Table 11. Prioritized vaccinations

Are some vaccinations considered priority	Countries	Total
No	PT	1
Yes	HR, IT, MT	3
Hepatitis B		
Poliovirus	HR, IT, MT	3
Tetanus	HR, IT	2
Diphtheria	HR	1
Pertussis		
Measles		
Rubella		
Mumps		
Measles-Mumps-Rubella	HR, IT	2
Hepatitis A		
Haemophilus influenzae type b		
BCG		
Varicella		
Influenza		
Pneumococcal		
Meningococcal		
HPV		

For what concerns vaccine administration, like what happens for children, the vaccination scheme for migrant adults is identical to that applied to natives in all responding countries, and the verbal informed consent is required in all countries (HR, MT, PT). The Italian responder did not know the situation for what concerns informed consent.

In Malta vaccines are delivered only at holding level and similarly to what happens for children, the first dose of IPV and DT is given at the Migrant Reception Centre before releasing migrants in the community. In Croatia though migrants usually get immunized at the reception center, there is also possibility to be immunized at the vaccination center in the Institute of Public Health (i.e at the community level as well, as it is stated below in section 3.4.4.). In Italy vaccines can be delivered both at holding and community level, depending on intensity of flow of migrants, length of stay, human resources and logistic aspects. In Portugal vaccines are delivered only at community level. Again, also for adults no country provides vaccinations at entry level (e.g. seaport, airport) (Table 12). Only Croatia has indicated the presence of SOPs for immunization practice in migrant (0-35 years), issued in January 2017.

Table 12. Information on vaccination delivery

Where are vaccinations delivered	Countries	Total
At entry level		
At holding level	HR, IT*, MT	3
At community level	IT*, PT, HR	3
Is informed consent for vaccinations requested to migrants		
Yes, verbal	HR, MT, PT	3
No		
I don't know	IT	1

*Site of delivery depends on the intensity of flow of migrants, length of stay of migrants, human resources, logistic aspects

4.5. Vaccination delivery at community level

Three countries (HR, IT, SI) affirmed that there are referral health facilities identified for providing vaccination to migrants, in case some or all vaccinations are not offered in the holding centres: these are local health units delivering public health services (SI specified that the referral health facilities are those public health care centres near the migrant centre) and only in Italy there is a formal agreement between the holding centres and the health facilities (public vaccination services) for the provision of this service (Table 13).

Table 13. Information on vaccination delivery at community level

	referral health facilities identified for providing vaccination to the migrants	Kind of health facility	any formal agreement?
Croatia	Yes, for children, adolescents, adults	Public health institutes	no
Greece	No		
Italy	Yes, for children, adolescents, adults	public vaccination services	yes
Malta	No		
Portugal	No		
Slovenia	Yes, for children, adolescents	Public health institutes	

Two countries (MT, PT) indicated that there are standard procedures that guarantee the migrants' access to vaccination at the community level in case vaccinations are not administered at holding level (Table 14).

Table 14. Standard procedures for migrants' access to vaccination at the community level

	Are there standard procedures that guarantee the migrants' access to vaccination at the community level	Description
Croatia	CIPH recommendations (SOP) were actually sent to the MoH in November 2016	
Greece	No*	
Italy	Don't know	
Malta	Migrants are informed on their vaccination needs but they access to vaccination at the community level by themselves	If the vaccination cannot be carried out at Reception Centre for any reason, the migrant is informed on where to go to receive the vaccine. This would be the Health Centre closest to his/her place of residence on release from Reception Centre
Portugal	Migrants are informed on their vaccination needs and dedicated health-social staff facilitate their access to vaccination at the community level	Migrants in need of social support go to health facilities accompanied, if necessary, by social workers
Slovenia	No	

*Until now, because vaccines have been given only through vaccination campaigns

4.6. Recording and transmission of information on migrants' immunization

Five responding countries (GR, HR, MT, PT, SI) answered that the information on administered vaccines is recorded on individual vaccination cards given to migrants. Malta and Portugal also record information on the general population electronic immunization registries, and Slovenia on paper immunization registries. In Croatia, data are sent periodically to the National Institute of Public Health, where there is an electronic database for immunized migrants (Table 15).

Table 15. Record of information on administered vaccines

	Record of vaccination	Where are recorded?	
		Individual vaccination Cards given to migrants	general population immunization Registries
Croatia	Yes	x	**
Greece	Yes	x	
Italy	No centralized data*		
Malta	Yes	x	electronic
Portugal	Yes	x	electronic
Slovenia	Yes	x	paper

*there is no national electronic database

** electronic database for immunized migrants at the National Public Health Institute

In GR, HR, PT and SI this information is made available to local/regional authorities, National Institute of Public Health or Ministry of Health (Table 16). In MT this information is made available to centres where migrants are relocated. PT also provides this information to WHO. In MT and PT this information is made available timely, in HR periodically, while in SI it is available on demand. In Greece, special reporting forms were used after the completion of a vaccination campaign in a camp to inform the Ministry of Health about the total number of each vaccine administered.

Table 16. Transmission of information on administered vaccines to other centres/institutions

	Information on administered vaccines is made available?	To whom is this information made available?						How often is made available?
		Regional Health Authorities	Local Health Authorities	Ministry of Health	Centres where migrants are relocated	International Institutions	National institute of public health	
Croatia	Yes	x					x	Periodically
Greece	Yes			x				After campaign
Italy	No centralized data *							*
Malta	Yes				x			Timely
Portugal	Yes**	x	x	x		x (WHO)		Timely
Slovenia	Yes		x					On demand

*there is no national electronic database. It's their purpose to verify this process

**aggregated data reflecting coverage are those available at these levels. Individual data are available only at local level, although PT affirmed they are implementing an electronic platform to make this information available.

4.7. Experiences and challenges

4.7.1. Vaccine shortage

Three of the six countries (GR, IT, PT) reported vaccine shortages in the last years (Table 17), although PT and GR affirmed that this shortage had absolutely nothing to do with migrant influx.

Table 17. Experiences of vaccine shortages

	Any particular vaccine shortage	Which vaccine/s	Cause	Year(s) of the shortage
Croatia	No			
Greece	Yes	IPV and Tdap-IPV	Shortage in the international market	2016
Italy	Yes	pertussis containing vaccines, meningococcal C and B vaccines		2015-2016
Malta	No			
Portugal	Yes	BCG, DTP	Out of production (BCG); new recommendation (DTP)	2015-2016
Slovenia	No			

4.7.2. Data on immunization coverage

Only one country (MT) reported that data on immunization coverage are collected, as the percentage of migrants that accepted vaccination out of the number of migrants arriving. They reported a coverage rate of 100% for one dose of DTP in adults and the 1st dose of DTaP-IPV-Hib in children (these are the doses given at holding centre or at first visit at health centre in the case of relocating migrants). All migrants seeking asylum are told to regularise their vaccines with further doses at the immunisation centre, and if they go they are entered in the database. Italy indicated that there is no collection at national level, but there may be at lower level.

4.7.3. Main practical challenges

Only three countries (HR, IT, MT) answered the question on which main practical challenges they experienced in migrants' access to vaccination and/or application of procedures for migrant immunization. Two responding countries (IT, MT) indicated low resources as one of the main practical challenge their country are dealing with. Lacking of operative procedures, need of specific training of health care workers on migrant health, and scarce collaboration with other health institutions are other identified challenges (Table 18).

Table 18. Practical challenges

Practical challenges	Countries	total
Need of specific training of health care workers on migrants' health	IT	1
Low resources	IT, MT	2
Logistic issues with the vaccines		
Lacking of operative procedures	IT	1
Low compliance of migrants to vaccination		
Scarce collaboration with other health institutions	HR	1

5. Survey at Local level

Overall, 170 local questionnaires were filled out from 5 countries (GR, HR, IT, MT, SI): 4 in Croatia, 6 in Greece, 157 in Italy, 1 in Malta and 2 in Slovenia (table 19).

Table 19. Responders at local level (health centres and migrant holding centres)

Type of questionnaire	Number of responders	Total
Health centres	2 Croatia 4 Greece 36 Italy 1 Malta 1 Slovenia	44
Migrant holding centres	2 Croatia 2 Greece 121 Italy 1 Slovenia	126

Vaccination offer to migrant children, according to the responders at local level, is identical to those offered to natives in Italy, Croatia, and Slovenia. Greece responders confirm the offer of the vaccination campaign, although some centres offer some further vaccinations. Malta confirms that they administer vaccines against polio, tetanus, diphtheria, MMR, pertussis and Hib (that are given to children under 10 years of age only, in combination with DTP), and specifies that between 10 and 16 years pertussis and Hib are not administered.

Vaccines are delivered to adult migrants in Italy (although with a heterogeneous situation among different health centres), Malta (polio, diphtheria and tetanus) and some centres in Greece (mainly for Hepatitis A and influenza, according to epidemic outbreaks or threats). Slovenia answered, in accordance to national level, that vaccines are delivered only in case of epidemic indications. None of the responding centres in Croatia indicated vaccination offer to adult migrants.

Vaccines are administered mainly in health centres in Italy and Slovenia. In Malta the first dose is administered at reception centre and, if further doses are needed, these are available in health centres. In Greece, vaccination have been administered at basic health care units or primary health care units located in the migrant centres (in the frame of vaccination campaigns) and, in some cases, health centres located nearby have also administered vaccines to newly arrived migrants. In Croatia vaccines are delivered both in health centres and in migrant centres (except for a detention centre for migrants who are going to be deported).

Information on administered vaccines are recorded in individual cards delivered to migrants in Greece, Croatia, and Malta, in a national electronic database for the general population in Malta, and in paper registry in Slovenia and in one centre in Greece. In Italy the situation varies among centres.

A national regulation or a legal framework supporting immunization procedures and shared with the health staff was indicated by SI, MT and one centre in HR. in Italy all health centres know a regulation, although some refer to national and some to regional regulation. In Greece, where vaccinations were delivered only through vaccination campaign, so far there was no need of any national regulation.

The main challenges reported at local level were low resources, need of specific training, logistic issues, scarce collaboration with other health institutions, lacking of operative procedures and low compliance of migrants to vaccination.

Detailed results of the local survey are reported in the single country profiles, that follow.

6. Country Profile: Croatia

6.1. General overview of the country

6.1.1. Overview of the health system

Croatia has a social health insurance system, based on the principles of solidarity and reciprocity, by which citizens contribute according to their ability to pay and receive basic health care services according to their needs. The steward of the health system is the Ministry of Health, which is responsible for health policy, planning, evaluation, public health programs and regulation. The Croatian Health Insurance Fund, established in 1993, is the sole insurer in the mandatory health insurance system, which provides universal basic health insurance coverage to the whole population. The Croatian Health Insurance Fund is also responsible for the payment of sick leave compensation, maternity benefits and other allowances. All other services (specialist examinations and services, hospital treatment, many medicines, etc.) require additional payment or complementary health insurance which can be obtained at one of several voluntary health insurance companies present in Croatia. The majority of primary care physicians' practices have been privatized but at the same time are public from a user's point of view, since their services are covered by mandatory health insurance, and the remaining ones were left under county ownership. Tertiary health care facilities are owned by the State, while the counties own the secondary health care facilities. Croatia's EU accession on 1 July 2013 required harmonization of the regulatory framework governing the health care sector with the relevant EU legislation, including coordination of the social security systems between Croatia and other EU Member States [5].

6.1.2. Vaccine administration

Majority (96%) of children < 6 years of age are vaccinated in public primary health care (PHC) services, the remaining proportion receive vaccination in private PHC services (3%) or in public vaccination services at the public health institutes (1%).
Vaccinations for school children and adolescents (6-18 years) are delivered mainly in school health services (80% of children of 6-11 years and 90% of adolescents between 11 and 18 years) within the public health institutes, while smaller proportion in public PHC services (16% of children and 6% of adolescents) and private PHC services (4%).
Half of the adults (50%) are vaccinated in public PHC services, 35% in in public vaccination services at the public health institutes, 10% in occupational medicine services, and the remaining 5% in private PHC services.

6.1.3. Reception of newly arrived migrants

A very heavy influx of migrants towards the Croatian border has begun in September 2015 and went on until April 2016. From September 2015 to 15 April 2016, over 660,000 migrants crossed the Croatian border. The vast majority of refugees and migrants were only transiting through the country, with the aim of reaching countries of western Europe.
During their short stay in the country, transiting migrants received necessary nourishment, while health care was offered only if they actively asked for it. During the migrant crisis, in the same period -September 2015 until April 2016- 25,815 refugees/migrants have received health care, mostly in the refugee camp or by emergency medical teams, and 794 in hospitals.

Several medical teams were on call at Serbian-Croatian borders, to intervene in case of emergency. From borders, migrants were transported to a temporary refugee camp, first in Opatovac, with a capacity of 4,000 people, until November 2015; and later on to the transit migrant camp in Slavonski Brod, in the Eastern part of the country as well, with a maximum capacity of 5,000 people. Here, healthcare services for refugees and other migrants had been organized, providing 24/7 the following services:

- Triage office with two primary health care doctors (general practitioners) and 2 nurses;
- Stationary part with 10 beds (3 for children) with one doctor and one nurse available;
- Emergency medical service, responsible for emergency healthcare and emergency transit to the nearest hospital, if necessary.

The camp had also an epidemiological team of two epidemiologists as well as two sanitary engineers responsible for disinfection and other hygiene measures [6].

The number of migrants crossing the Croatian borders has been constantly easing in winter 2016, after the closure of the Balkan route. At the moment, there are no hotspots and centres for transient migrants in the country, and migrants are hosted in two migrant reception centres (Porin and Kutina) and one detention center (Ježevo).

6.2. Immunization policies at the national level – National survey

The national questionnaire was filled by a public health expert from the Croatian Institute of Public Health.

In Croatia, a national law was specifically established for migrants' immunization in 2008 (http://narodnenovine.nn.hr/clanci/sluzbeni/2008_04_39_1346.html), and immunization policies targeting migrants are homogeneous in the whole country.

Vaccination of asylum-seeking and refugee children under 18 years of age is delivered for all vaccinations included in the NIP appropriate for age; poliovirus and MMR are prioritized vaccines, as well as vaccines against diphtheria, tetanus and pertussis in preschool children. Vaccination against polio, measles, tetanus and diphtheria are offered to asylum-seeking adults from 18 to 35 years of age.

Vaccines are delivered at holding level and referral health facilities at community level have been identified for providing vaccination to the migrants if some vaccines are not delivered at holding level. Information on administered vaccines is recorded on individual cards given to migrants, and is periodically sent in an excel format (containing name and surname, birth date, country of origin, date of vaccination, as well as the name, lot and producer of the administered vaccine) to National Institute of Public Health. From January 2017, the operational protocol on immunization practice in migrants (SOP) sent to MoH in November 2016 is fully implemented, as well as the logistic and expert support from the National Institute of Public Health provided to all field vaccinators.

6.3. Immunization practices at the local level – Local survey

6.3.1. General information on responding centres

Responders with different professional roles filled out questionnaires for health centres: one MD epidemiologist/public health officer for a Public Health centre (whose answers were spilt in two different services that were described separately as "centre 1" and "centre2") and one MD pediatrician from the centre 3 (Table I). One MD general practitioner and one MD providing vaccinations filled out two questionnaires for the same holding centre for asylum seekers (centre a), and a MD general practitioner filled out the questionnaire for a detention centre (centre b) (Table II).

Health centres

One of the responding health centres provides general PHC services (centre 3), while for the other Public Health centre two services have been described: an epidemiology service (centre 1) and a school medicine service (centre 2). Centre 1 targets mainly adult people, and centre 2 and 3 provide services for children, centre 2 for school aged children, and centre 3 for preschool aged children. All centres provide clinical assessment and fill individual records with health information. All responding centres are supported by the presence of a cultural mediator. Vaccines are available in both centres, but centre 1 stores them only with the purpose of distribution to MD pediatricians and MD general practitioners (Table I).

Table I. Information on health centres

Centre	City	Type of service	Age groups	Clinical assessment?	Health record	Cultural mediator	Vaccines available?
1	Zagreb	Epidemiology service	Mostly adults	Yes	Yes	Yes	Yes*
2	Zagreb	School medicine service	School-aged children	Yes	Yes	Yes	Yes
3	Zagreb	Primary Care Service	<6 years	Yes	Yes	Yes	Yes

* Primarily for distribution to field vaccinators i.e. MD pediatricians, MD general practitioners and school medicine service

Migrant centres

Both centres that have filled out the survey are in Zagreb and are managed by institutions contracted by governmental body, one by the Ministry of Health and one by Ministry of Interior. The reception center (centre a) is a holding centre for asylum seekers with the maximum capacity of 600 people. Centre b is a closed-detention centre with 20 people at the moment the survey was filled, with a maximum capacity of 102 people. Both centres are hosting minors, who are accounting for 25-50% of the total population in the centre a, while it is not possible to evaluate the proportion of minors hosted in centre b because it varies over time (Table II).

For both centres, health services and vaccinations are administered by the local public health care staff.

Table II. Information on migrant centres

Centre	City	Type of centre	Institution in charge	Managed by institutions contracted by governmental body?	Centre active since	N° of migrants hosted (max capacity)	Length of stay in the Centre	Presence of minor migrants?	Health facility in the centre?
a	Zagreb	Holding centre for asylum seekers	Ministry of Interior	Yes	-	500 (600)	6 month - 1 year	Yes (25-50% of the total population hosted)	Yes
b	Zagreb	Closed-detention centre	Ministry of Interior	Yes	01/07/1997	20 (102)	2-6 months	Yes*	Yes

* Not possible to evaluate the proportion of minors (< 18 years) out of the total population hosted of the Centre because it varies over time

6.3.2. Vaccination offer

Children/adolescents

All centers but one (centre b) check the immunization status of children/adolescents under 18 years through anamnesis and verification of immunization cards. None of them provides lab testing in case immunization card is not available. Three centres answered they provide vaccination according to NIP; centre 3 with 6 years and the others with 18 years, as age limit. Informed consent is required verbally in all centres (Table III).

Table III. Information on check of immunization status and vaccination offer to migrant children/adolescents

Centre	Check of immunization status			Vaccination offer				
	Age limit (years)	For which vaccines	Laboratory tested?	Are vaccines offered?	Age limit (years)	Prioritized vaccination	Special vaccination scheme?	informed consent
1	18	All included in NIP	No	No*				
2	18	All included in NIP	No	Yes	18	No	Vaccination cycle is provided or completed according to NIP	Yes, verbal
3	18	All included in NIP	No	Yes	0-6	Yes	Vaccination cycle is provided or completed according NIP	Yes, verbal
a	18	All included in NIP	No	Yes	0-18	Yes	Vaccination cycle is provided or completed according to NIP	Yes, verbal
b	NA**	No	No	No				

* Only MD pediatricians, MD school medicine specialists and MD general practitioners are identified for providing vaccination to migrants

** Detention center for irregular migrants who get deported rather soon, therefore immunization is not implemented

Vaccines offered by the centres are those included in the NIP appropriate for age, and only centre a indicated the prioritization of MMR vaccine.

Depending on the organizational arrangements, vaccination may be delivered at holding level in migrant centre a or in health centre 2 (school medicine service at the public health institute) and 3 (pediatricians and GPs in the primary health centre). Centre 1 (epidemiology service at the county public health institute) is primarily responsible for vaccine provision and distribution to vaccinators (pediatricians, general practitioners, school medicine specialists). The centre denominated b has vaccines available but usually do not delivers them, since it is a detention center for (adult) irregular migrants who get deported.

Both migrant centres have onsite health facilities and in both cases the health services offered inside the Centre are managed by the local health care staff (primary health care centre and county public health institute).

All centres indicated the presence of a public health service or PHC workers to which they can refer in case some vaccines are not administered in the responding centre, but formal agreements between the centres and the referral health facility were mentioned only by the centre 2. Standard procedures that guarantee the migrants' access to vaccination at the community level have been indicated by centre "a" with a specific agreement with school doctors from Jan 2017 (Table IV).

Table IV. Vaccination delivery, other health facilities delivering vaccines for migrant children/adolescents

Centre	Where are vaccinations delivered?	referral health facilities in case some are not administered	Any formal agreement?	Standard procedures that guarantee access to vaccination at the community level
2	Community level (County public health institute)	School medicine service	Yes	No
3	Community level (Primary health centre)	MD paediatricians, GPs	No	No
a	At holding level	Public health institute/Primary health centre	No answer	Yes, agreement with school doctors from Jan 2017
b	NA*	Public health centres	I don't known	No

*NA not applicable (at the moment)

Adults

Although at national level is indicated a specific vaccination schedule and vaccination offer for adult asylum seekers, at local level no responding centre has indicated a vaccination offer to adult migrants.

6.3.3. National regulation, Standard Operative Procedures (SOPs) and data recording

Only one out of 4 of the centres responding to the question (centre 3) has knowledge of the national regulation on this topic.

Again, only the centre "a" pointed out the presence of SOPs for migrants' immunization, for school children (6-15 years) from January 2017. The aspects covered by these SOPs are the check and recording of migrant immunization status, recording of administered vaccines, flow of Information regarding migrants' immunization from the local to the regional level.

For what concerns data recording, three out of 4 centres (one of the migrant centres and both health centres) answered that they register information on immunization status on individual health records given to migrants.

This information is made available monthly to the National Public Health Institute by all centres providing vaccination. Both health centres make available these data at community level and the centre 1 shares these data also with the centres where migrants are hosted monthly. The migrant centre b does not share information about immunization status (Table V).

Data on administered vaccines are recorded on individual vaccination cards delivered to migrants and are being sent periodically to the National Institute of Public Health as well. All information is about children and adolescents, while so far young adults are not being systematically vaccinated (Table V).

Table V. Data recording and transmission

			Centres			
			2	3	a	b
Information on immunization status	**Where is information on immunization status recorded?**	Individual health record delivered to migrants	x	x	x	
		Individual health record archived in the Service	x			
		No				x
		Other			x (on individual health records archived in the School doctor office)	
	Is information on immunization status of migrants made available?	To National Public Health Institute	x	x	x	
		To GPs, paediatricians working in vaccinations at the community level, vaccination services	x	x		
		To the Centre where migrants are hosted	x	x		
		No				x
	How frequently is information made available?		Monthly	-	Monthly	-
Information on administered vaccines	**Where is information on administered vaccines recorded?**	Individual vaccination cards delivered to migrants	x		x	x
		paper archives dedicated to migrants				x
		In general population paper immunization registries	x	x	x	
	Is information on administered vaccines to migrants made available?	Yes, to community vaccination service / local health authorities	x	x	x	
		Yes, to the Centre where migrants are hosted	x	x		
		To Regional Health Authorities			x	
		To National Public Health Institute	x	x	x	
		I don't know				x
	How frequently is information made available?		Monthly	-	Monthly	-

6.3.4. Experiences and challenges

The responders of all centres indicated no experiences of vaccination shortages.

The main challenges indicated by the health centres are the need of specific training of health care workers on migrants' health, logistic issues, lacking of operative procedures and scarce collaboration with other health institutions (2 centres stated all challenges). One centre underlined the problem of low resources.

Croatia Summary Box

- Vaccination offer to children identical to what is offered to natives, according to NIP. At national level polio and MMR have been indicated as priority vaccines, while at local level this information was not reported.
- We have no information from centres vaccinating adults so we can not make any comparison from policies and practices.
- Vaccination delivered at holding level but not in one of the 2 described migrant centres (despite the availability of vaccines), because is a detention centre with some specificities.
- There is a national law but apparently it is not well known at community level/in holding centres.
- Challenges: need of specific training, logistic issues scarce collaboration with other health institutions.
- Lacking of operative procedures was solved in January 2017. Guidelines (SOP) sent to MoH in November 2016 and implemented since January 2017

7. Country Profile: Greece

7.1. General overview of the country

7.1.1. Overview of the health system

The Greek health care system comprises elements from both the public and private sectors. In relation to the public sector, elements of the Bismarck and the Beveridge models coexist. Social insurance funds provide for a large amount of primary care and ambulatory services. The social insurance system used to comprise about 30 different social insurance organizations, which are now in a process of unification, initially replaced by a small number of organizations and ultimately by a single one.

The private sector includes profit-making hospitals, diagnostic centres and independent practices, financed mainly from out-of-pocket payments and, to a lesser extent, by private health insurance. A large part of the private sector contracts with social health insurance/sickness funds to provide mainly primary care, and is financed on a fee-for-service basis according to predetermined agreed prices [5].

7.1.2. Vaccine administration

In Greece, since 2016 all vaccines of the National Immunization Program are provided free of charge to all people covered by the "National Organization for Health Provision" (EOPYY), which covers virtually all citizens residing and/or working in the country, irrespective of employment status; at this point in time, refugees/migrants of the 2015-16 wave are not covered. Vaccination is carried out either in the private or in the public sector at the primary health care level; an out-of-pocket fee is paid in the former, while there is no charge in the latter. A national study performed in 2012 showed that 65-70% of all childhood vaccines were administered in the private sector.

7.1.3. Reception of newly arrived migrants

Migrant flows arriving to Greece by the sea increased dramatically in 2015, with almost 900,000 people landed to Greek coasts by the end of the year. Migrants were mainly Syrians, Afghans and Iraqis. The country faced many problems during reception of this flows, mainly due to lack of funding, which leads to limited number of staff, lack of shelters, lack of basic facilities (access to WC and water), need of specific training of health staff and police, burn-out syndrome for the employed staff [6].

The migratory pressure at the European external borders (from Turkey, across Greece, Balkan and up to western Europe) has been constantly easing since winter 2016. The reasons were mainly the agreement between the EU and Turkey that has removed the incentives to move on irregular routes to Greece and undermined the business model of people smuggling networks, and the developments on the Western Balkan route, that have discouraged many from making a dangerous sea crossing to reach the Eastern Aegean Islands [1].

According to Frontex [1], the number of migrants arrived in 2016 through the Eastern Mediterranean route was 182,534, of which the vast majority arrived on Greece. Again, main nationalities were Syrians (47%), Afghans (24%), and Iraqis (15%). The number of migrants present in Greece in December 2016 was around 62,000.

At the moment in Greece migrants are hosted in 3 hotspots and around 45 reception centres/camps.

Health professionals providing health services to hosted migrants are mainly staff from different NGOs (e.g. Red Cross, MSF), and in late 2015 the Ministry of Health set up a committee responsible for the coordination of all NGOs involved in the field of health [6].

The health care needs of newly arrived migrants hosted in hotspots or reception centres are managed by Primary health care clinics located in almost all hotspots and reception centres.

7.2. Immunization policies at the national level – National survey

Vaccination of newly arrived migrant children under 15 years of age in all reception centres, as well as in urban settings, has been carried out through vaccination campaigns. These have been performed mainly by 4 major NGOs (but also by public services) and were coordinated by the Ministry of Health and Regional Health Authorities.

The plan of the campaigns included prioritized vaccines (according to specific recommendations by the National Immunization Advisory Committee):

- one dose of hexavalent vaccine (DTP-IPV-HBV-Hib) for children <5 years of age
- one dose of conjugate pneumococcal vaccine (PCV) for children <5 years of age
- one dose of MMR vaccine for children 1 to 15 years.

After the completion of the campaigns, within which one dose of the above vaccines have been administered, the integration of vaccination with National Immunization Plan in routinely primary care setting is planned. It will be carried out by public primary care services as well as the major NGOs.

After the completion of campaigns, each institution filled in data on administered vaccines.

A vaccination program to immunize high risk (age 60+, pregnant women, people with specific health conditions) migrants/refugees in reception centres and urban settings against influenza has been implemented.

7.3. Immunization practices at the local level – Local survey

7.3.1. General information on responding centres

Four questionnaires for health centres were filled out by responders with different professional roles: one health coordinator for the centre 1, one public health professional for a centre managed by an NGO (centre 2), one nurse for the other centre managed by an NGO (centre 3) and one site officer for centre 4. Two questionnaires for migrant centres were filled out, by the two people who have also filled out questionnaires for health centre 1 and 4 (Table I).

Health centres

Three responding health centres provide general PHC services, and one is described as a vaccination service in the frame of a vaccination campaign (centre 3). Centre 1 and 3 provide services only for children and adolescents under 15 years of age, centres 2 and 4 guarantee services to newly arrived migrants of all ages. All centres provide clinical assessment, but only centre 2 and 4 fill individual records with health information. Three of them are supported by the presence of a cultural mediator (the fourth benefits from cultural mediators of the hosting centre). Vaccines are available in 3 out of 4 centres (1, 3 and 4).

Table I. Information on health centres

Centre	City	Type of service	age groups	Clinical assessment?	Health record	Cultural mediator	vaccines available?
1	Athens	Centre for PHC services	<15	Yes	No	No*	Yes
2	Leros, Kos	Centre for PHC services and Reception and Identification Centres	all ages	Yes	Yes	Yes	No**
3	Athens	Public health vaccination service in the frame of medical vaccination campaign	<15	Yes	No	Yes	Yes
4	Ritsona	Basic Health Care Unit providing primary care services	all ages	Yes	Yes	Yes	Yes

* Migrants come from holding centres and are accompanied by the centres's cultural mediators
**Vaccines are not yet offered routinely, but a mass campaign has been held to vaccinate children under 15 with the first dose of Hexavalent, MMR and PCV

Migrant centres

The two centres that have filled out the survey completely are administered by the same institution, one in Skaramagas (Athens) hosting more than 3,000 people, and one in Ritsona, with 430 people at the moment the survey was filled. Both centres have been opened in March 2016 and both are hosting minors for an amount of 25-50% of the total population (Table II).

Vaccinations for migrants living in hosting centres are administered at the Primary Health Care centre/unit, located at the hosting Centre. These services have been described by the responders at questionnaire on migrant centres (and are named "centre a" and "centre b").

The health staff of the Hosting centre in Skaramagas (centre a) has been supported by the Health Centre in Athens, when migrant families with unvaccinated children arrived while there were no mass vaccination campaigns programmed. Furthermore, Ministry of Health has announced that migrants have the option, especially for the ones living outside the accommodation centres, that is in the urban setting, to receive vaccination at the Public Primary Health Care Centres. The Health Centre in Athens has been described by the responder in the questionnaire on health centre (centre 1).

The answers for Ritsona Camp (named "Migrant centre b") were identical to those filled in the survey for Health centre in Ritsona (centre 4). So, we decided to report these data only once, referring to it as "centre 4").

Table II. Information on migrant centres

Centre	City	Type of centre	Managed by institutions contracted by governmental body?	Centre active since	N° of migrants hosted (max capacity)	Length of stay in the Centre	Presence of minor migrants?	Health facility in the centre?
a	Skaramagas (Athens)	hosting centre	No	10/03/2016	3178 (5000)	>1 year	Yes, of all ages, 25-50% of the total population	Yes, managed by NGOs and Navy. Providing vaccination
b	Ritsona	Camp (hosting centre)	Yes (Ministry of Defence*)	13/03/2016	430 (576)	6 months-1 year	Yes, of all ages, 25-50% of the total population	Yes, managed by NGOs Providing vaccination

*Turning into Ministry of Migrations

7.3.2. Vaccination offer

Children/adolescents

All centers check the immunization status of children/adolescents, but age limits and checked vaccines vary among centres. None of them provides laboratory testing in case immunization card is not available. All centres but one answered they provide vaccination, all with 15 years of age as age limit, according to vaccination campaign (Table III). Available and offered vaccines also follow the indication of the campaign, and the vaccination scheme for these vaccines is adapted according to the campaign, although in some centres varicella, influenza and hepatitis A vaccines are also available. Prioritization is not homogenous, and centre 3 affirmed they have no prioritized vaccines (Table IV). Informed consent is required verbal in all centres.

Centre "a" specifies that vaccinations are administered by staff from NGOs, public health staff and Navy.

Table III. Information on check of immunization status and vaccination offer to migrant children/adolescents

Centre	Check of immunization status			Vaccination offer				
	Age limit (years)	For which vaccines	Laboratory tested?	Are vaccines offered?	Age limit (years)	Prioritized vaccination	Special vaccination scheme?	informed consent
1	14	No answer	No answer	Yes	15	Yes	For some vaccinations (not specified)	Yes, verbal
2	18	All included in NIP	No	Yes*		Yes	For MMR, PCV, Hexavalent	**
3	16	MMR/PCV/DTP-Polio-Hib-HBV		Yes		No	For MMR, PCV, Hexavalent	Yes, verbal
4	15	All included in NIP		Yes		Yes	For some vaccinations (according to Greek Ministry of Health)	Yes***
a	15	MMR/varicella	No	Yes	15	Yes	For vaccines included in the campaign (MMR, PCV, Hexavalent)	Yes, verbal

* Answers are describing the mass campaign, vaccines are not yet offered routinely in the centre.
**Parents are informed in detail about the vaccination process and which vaccinations will be conducted. While consent is not sough, parents are part of an 'opt-in' system.
***All parents and people are informed and they decided if they want or not to be vaccinated.

Table IV. Vaccines available/offered/prioritized in each centre and in the campaign at national level, for children/adolescents

	Centres	Available	Offered	Prioritized	Campaign at National level		Centres	Available	Offered	Prioritized	Campaign at National level
Hepatitis B	1					**Hib**	1				
	2						2				
	3						3				
	4						4				
	a						a				
Poliovirus	1					**BCG**	1				
	2						2				
	3						3				
	4						4				
	a						a				
Tetanus	1					**Varicella**	1				
	2						2				
	3						3				
	4						4				
	a						a				
Diphtheria	1					**Influenza**	1				
	2						2				
	3						3				
	4						4				
	a						a				
Pertussis	1					**Pneumococcal**	1				
	2						2				
	3						3				
	4						4				
	a						a				
Hepatitis A	1					**Meningococcal**	1				
	2						2				
	3						3				
	4						4				
	a						a				
HPV	1					**MMR**	1				
	2						2				
	3						3				
	4						4				
	a						a				

Vaccination are delivered at holding level in centre 2, 3 and 4. Centre 1 indicated the health centre itself as location for vaccination delivery. Centre 2 indicated that vaccinations have been delivered also at community level, and explained that migrants and refugees are living in various accommodation facilities around the country, including Hotspots, official and unofficial camps and hotels/apartments; depending on where people are staying when mass campaigns are ongoing, they are vaccinated at their location (if living in apartments for example, children are vaccinated at the local health centre or a community clinic). Despite this, only centre 2 and 3 identified a

referral health facility for vaccination in case some vaccinations are not administered at the health facility in the holding centre, and none with formal agreement to facilitate migrants' access. Centre 4 expressed their difficulties in identifying where migrants can get vaccines out of their health facilities, because the system in place for them to get it was not implemented at the time the survey was filled (Table V).

Standard procedures that guarantee migrants' access to vaccination at the community level have been indicated by centre 2 and 3 (Table V). Anyway, when asked to explain how the procedure works, centres 2 and 4 explained they act following MoH guidelines, implemented for the vaccination campaign.

Table V. Vaccination delivery, other health facilities delivering vaccines for migrant children/adolescents

Centre	Where are vaccinations delivered?	referral health facilities in case some are not administered	Any formal agreement?	Standard procedures that guarantee access to vaccination at the community level
1	Health centre	No		No
2	At holding and community level	Public health centres (local facilities or hospitals)	No	Yes, Migrants are informed on their vaccination needs and dedicated health-social staff facilitate their access to vaccinations at the community level
3	At holding level	center of mother and child (governmental) /open polycklinic mdm	I don't know	During the campaign, we vaccinate everyone in target group at holding level. If a child is not vaccinated at the time of the campaign, we keep their vaccines at our clinic or there is a mdm clinic at public health services. Migrants are informed on their vaccination needs but they access to vaccinations at the community level by themselves. Formal agreement with private-public health services are signed to facilitate migrants' access to vaccinations at the community level
4	At holding level*	No**		No
a		No		No

*vaccines are administered at the Red Cross health facility to facilitate the cold chain

**trying to identify where they can get vaccines out of our Health facilities, but the system in place is not implemented yet

Adults

Vaccination campaigns described in the survey at National level is targeted to children only. According to answers given at local level, vaccination offer to adults is limited and varies according to specific problems/choices of each hosting centre/health centre. For example, centre 4 explained that they provide vaccination for hepatitis A (administered also in centre 2) because they had an outbreak. In migrant centre a, influenza vaccine is given according to flu vaccination campaign, and centre 4 also proves influenza vaccine). Concerning the 3 centres where at least one vaccine is offered, immunization status is checked only in one centre, and informed consent is usually required verbally (Table VI).

Table VI. Information on check of immunization status and vaccination offer to migrant adults

Centre	Check of immunization status			Vaccination offer				
	Is perfor med?	**Which vaccines?**	**Laborato ry tested**	**Are vaccinations offered?**	**Which vaccinations**	**Prioritized vaccinations**	**Special vaccinatio n scheme?**	**Informed consent?**
1	No		No	No answer			No answer	
2	No			Yes, to adults at risk (Adults living with children, or diagnosed with Hepatitis A)	**Hepatitis A**	No		don't know
3	No			No	**None**	No		
4	Yes, all ages	Hepatitis A* Tetanus		Yes, to adults at risk (vulnerable people, pregnant, special medical situation)	**Tetanus, Hepatitis A, Influenza**	Tetanus, influenza, hepatitis A**	No	Yes, verbal
a	No		No	Yes	**Influenza*** **	Influenza	Yes***	Yes, verbal

*The centre had an outbreak of Hepatitis A

** Everything according to Greek Ministry of Health guidelines

***Following flu mass vaccination campaign

Vaccination are delivered at holding level in centre 2 and 4 and also at community level in centre 2, the responder explained that it depends on where migrants are living, as it happens for children.

Again, only centre 2 and 3 identified a referral health facility for vaccination in case some vaccinations are not administered in the hosting centre, and none with formal agreement to facilitate migrants' access (Table VII).

Standard procedures that guarantee the migrants' access to vaccination at the community level have been indicated by centre 2 and 4 (Table VII).

Table VII. Vaccination delivery, other health facilities delivering vaccines for migrant children/adolescents

Centre	Where are vaccinations delivered?	referral health facilities in case some are not administered	Any formal agreement?	Are there standard procedures in place that guarantee the migrants' access to vaccination at the community level?
1				
2	Holding and community level*	Public facilities	I don't know	Don't know. Vaccinations are organised through the Hellenic Centre for Disease Control
3		Public health services, mdm clinics	No	Don't know
4	Holding level**	No		Trying to identify where they can get the vaccines if not possible in the facilities, but not easy because their papers status is not available yet in Greek facilities.
a		No		No

*Depends on length of stay and logistic aspects (where migrants are living)

**Vaccines are administered at the Red ross health facility to facilitate the cold chain

7.3.3. National regulation, Standard Operative Procedures (SOPs) and data recording

Three out of 4 of the health staff responding to the health centre survey did not know if there is a regulation supporting immunization practice for migrants. The fourth health centre and migrant centre "a" identified a national regulation specifically established for migrants. The vaccination of migrants is performed only through vaccination campaigns, so far there is no need of any legal framework supporting immunization practices.

Again, the centre 4 and centre "a" only pointed out the presence of SOPs for migrants' immunization, for people of all ages for centre 4, and below 15 years of age for centre "a". The aspects covered by these SOPs are for centre 4 prioritization of vaccines offered to migrants, check and recording of migrant immunization status, recording of administered vaccines, flow of Information regarding migrants' immunization from the Service to the community level, and procedures for health care workers training on migrant health care. For centre "a" the SOPs covered logistic aspects of vaccination and recording of the administered vaccinations.

For what concerns data recording, all the health centre answered that they register information on immunization status on individual health records given to migrants, while two centres recorded it also on individual health record archived in the service, and one (centre 4) also in paper archive dedicated to migrants. Migrant centre "a" answered they do not record the immunization status of migrants. This information is made available to Ministry of health by all responding centres. Some centres indicated availability of the data also for other institutions (Table VIII).

Data on administered vaccines are also recorded on individual vaccination cards delivered to migrants (coherently with the answer at National level) and, again, centre 4 recorded also vaccine administration data on paper archives dedicated to migrants. Only two health centre affirmed that they make information on administered vaccines available to Ministry of Health, as it is recommended at national level (Table VIII).

Table VIII. data recording and transmission

			Centres					
			1	2	3	4	a	
Information on immunization status	Where is information on immunization status recorded?	Individual health record delivered to migrants	x	x	x	x		
		Individual health record archived in the Service			x	x		
		Paper archives dedicated to migrants				x		
		Other			x*		x*	
	Is information on immunization status of migrants made available?	To the Centre where migrants are hosted			No answer	x^		
		To Local Health Authorities				x^		
		To Ministry of Health	x**	x		x^		
		To National Public Health Institute		x		x^		
		To NGOs				x^		
	How frequently is information made available?		Following campaigns	On demand	Following campaigns			

			Centres					Greece
			1	2	3	4	a	
Information on administered vaccines	Where is information on administered vaccines recorded?	individual vaccination cards delivered to migrants	x	x	x	x	x	x
		paper archives dedicated to migrants				x		
	Is information on administered vaccines to migrants made available?	No	x					
		To the Centre where migrants are hosted				x§		
		To Local Health Authorities				x§		
		To Ministry of Health		x		x§	x	x
		To National Public Health Institute		x				
		To NGOs				x§		
		I don't know			x			
	How frequently is information made available?			Following campaigns	Timely***		when vaccination is conducted	No answer

*Vaccines are recorded in the yellow booklet from WHO, for everyone who is vaccinated

**Vaccination report

^Verbal for camp management, paper records for National Health Systems

§Verbal to NGOs and camp management, paper records to Health Minister

***Database is accessible by approved staff

Further information on immunization compliance/coverage has been collected and made available by 2 health centres (3 and 4). Centre 2 affirmed an attempt of collection, but it has proved difficult due to the overestimation of denominators (Table IX).

Table IX. Additional data on compliance/coverage

	1	2	3	4	a
Data on migrants' compliance to vaccination or vaccination coverage?	No	No*	name/age/sex/ mark of BCG	Yes	No
Period for which compliance/coverage is assessed			No answer	July to nowadays	
Area where compliance/coverage is assessed			Malakasa	Ritsona	
Vaccine offered			MMR PCV Hexavalent	MMR, DTP-Polio, HAV, Varicella, HBV, PCV, HiB, Influenza	
Population target			4months-15years	Children below 15, adults following HAV outbreak	
Number of migrants eligible for vaccination			250 children	250	
Number of migrants to whom this vaccination is offered			250children	250	
Number of migrants who started the vaccination series			almost 250 children	200	
Number of migrants vaccinated who completed the vaccination series			don't know	Not complete yet	

* Attempted but difficult due to overestimation of denominator

7.3.4. Experiences and challenges

The responders of health centres indicated no experiences of vaccination shortages.

The main challenges indicated by the health centres are the low resources and funding (2 centres), need of specific training for health care workers, logistic issues, lacking of operative procedures, and scarce collaboration with other health institutions (1 centre each). One centre underlined the difficulty of migrants to get other vaccinations out of the hosting centre and the lack of coordination information from authorities. The responder would suggest to carry out normal immunization programs instead of running mass vaccinations.

Greece Summary Box

- Vaccination offer to children is implemented not routinely, but through vaccination campaigns
- Non-homogenous vaccination offer to adults
- Vaccine administration is coherent with the vaccination campaign (centre 4 and b affirmed they receive vaccine from MoH so it is quite obvious).
- Difficulties for newly arrived migrants to have access to vaccinations not included in the vaccination campaign. It would be good for them to have access to public services for the Greek population or better information on how is it possible to obtain this access. There is planning for providing vaccines to migrant children as part of routine vaccination, should be implemented soon.

8. Country profile: Italy

8.1. General overview of the country

8.1.1. Overview of the health system

Since 1978, in Italy was established the National Health Service (Servizio Sanitario Nazionale, SSN), a system based on the Beveridge model, that provides universal coverage largely free of charge at the point of delivery [5].

Since the early 1990s, culminating in 2001 with a Constitutional Law (n.3, 18 Oct 2001), the responsibility for the provision of health services to the population has been gradually decentralized. Considerable powers, particularly in health care financing and delivery, have been progressively devolved to the 19 Regions and 2 Autonomous Provinces (AP) which differ in size, population and level of economic development [7] (Figure I). Each Region has its own budget for health, has the power to decide for the provision, within the public scheme, of additional services and additional quality standards. For this reason, vaccination offer and practices may differ across the Italian territory, although within the Italian legal framework. At local level, geographically based local health units (LHU) deliver public health, community health services and primary care directly, and secondary and specialist care directly or through either public hospitals or accredited private providers [5].

Figure I. Regions of Italy

8.1.2. Vaccine administration

Each person regularly residing in Italy has the right of owning an individual fiscal codes, and thereby accessing to the National Health System. In Italy, vaccines are administered to all children by public vaccination services. Adults receive vaccinations in public health service, except for flu vaccine, that is regularly performed by General Practitioners (GP). As the public health system is decentralized, it is possible that in some regions or local health units some vaccinations are performed also by Primary care services through specific agreements.

8.1.3. Reception of newly arrived migrants

The number of migrants that arrived in Italy in 2016 has not been reduced by the closure of the Balkan route. Instead, this has increased the number of those who challenge the crossing by sea. In 2016, 181,126 (around 30,000 more than 2015) migrants leaving from Libya crossed the Mediterranean Sea, and arrive to the EU landing on the Italian coast [1].

The reception system is changing over time to accommodate changing situation. At the time of the survey, migrants at their arrival were hosted in Hotspots located at borders and First Reception Centre (named CPSA), where they stay 24 to 48 hours, and receive a first rapid health check and emergency care for those in need. Then, migrants who seek for asylum in Italy are sent to Hub centres in the whole Italian territory, 13 governmental centres for refugees' reception where they should stay up to a maximum of 30 days. Some of these governmental centres are named CARA (Reception Centre for asylum seekers) and CDA (holding centre). After leaving these centres, migrants should be accommodated within the SPRAR system, centres ruled by a net of local institutions aiming at the protection of these people and the integrated reception at community level. Migrants who don't want to ask for asylum are relocated in centres for identification and expulsion (named CIE), waiting for being accompanied back to their country of origin.

Since 2015, this system was not sufficient to accommodate all migrants coming to Italy and asking for international protection. Therefore, a great amount of extraordinary holding centres (CAS) have been opened, ruled by different associations and cooperatives, that should avoid people of staying in Hub centres too much time, and should temporarily supply the congestion of the SPRAR system. The flows have never ceased, and now these centres are around 3,100 and are hosting the highest percentage of asylum seekers in Italy (more than 70%), while only 7% of migrants are in Hubs, and less than 20% in the SPRAR system.

Whichever the accommodation, migrants in the Italian territory have the right to receive healthcare services, including preventive services, that are available for Italian citizens. Refugees and asylum seekers are assigned to a paediatrician or to a GP and are addressed to PHC services to receive some screenings and vaccinations. Also, irregular migrants with a temporary code (STP code) can access the healthcare services.

8.2. Immunization policies at the national level – National survey

The national questionnaire was filled by a public health expert from the Italian Ministry of Health.

In Italy, a national law was specifically established for migrants' health in 1998. In 1993 a technical document had already been published by the Ministry of health on vaccinations for migrant 0-14 years of age, and has been further developed and integrated in 2011 and 2014, following subsequent migrant flows (Table I).

Table I. National documents used elaborating policy

Type of document	Year	Link
Ministerial Circular	1993	http://www.trovanorme.salute.gov.it/norme/renderNormsanPdf?anno=0&codLeg=23605&parte=1%20&serie
Law	1998	http://www.camera.it/parlam/leggi/98040l.htm
Operative procedures	2011	http://www.salute.gov.it/imgs/C_17_newsAree_1478_listaFile_itemName_1_file.pdf
Ministerial Circular	2014	http://www.seremi.it/sites/default/files/Ministero%20Salute%20-%20Aggiornamento%20delle%20raccomandazioni%20di%20immunoprofilassi%20poliovirus%209%20maggio%202014.pdf

Immunization policies targeting migrants should be homogeneous in the whole country as they come from a national law. Nevertheless, the situation may differ across the regions, due to the decentralized health system and the fact that some regions are much more involved in migrations than others.

Asylum seekers from 0 to 15 years are offered all the vaccination included in the National Immunization Plan appropriate for age, with the same vaccination scheme applied to natives. A priority is given to Polio, Tetanus and MMR. Vaccination offer to adults is limited to polio, tetanus in case of exposed wounds, and MMR.

Vaccines are delivered at holding and community level, depending on logistic aspects, the intensity of flow of migrants, length of stay of migrants and human resources.

Italy indicated that no standard operative procedures for immunization practice of children-adolescent migrants nor for facilitating migrants' access to vaccination at the community level are in place.

In Italy data on immunization status aren't collected at national level and only population aggregated data on vaccine administered are sent to National level.

8.3. Immunization practices at the local level – Local survey

8.3.1. General information on responding centres

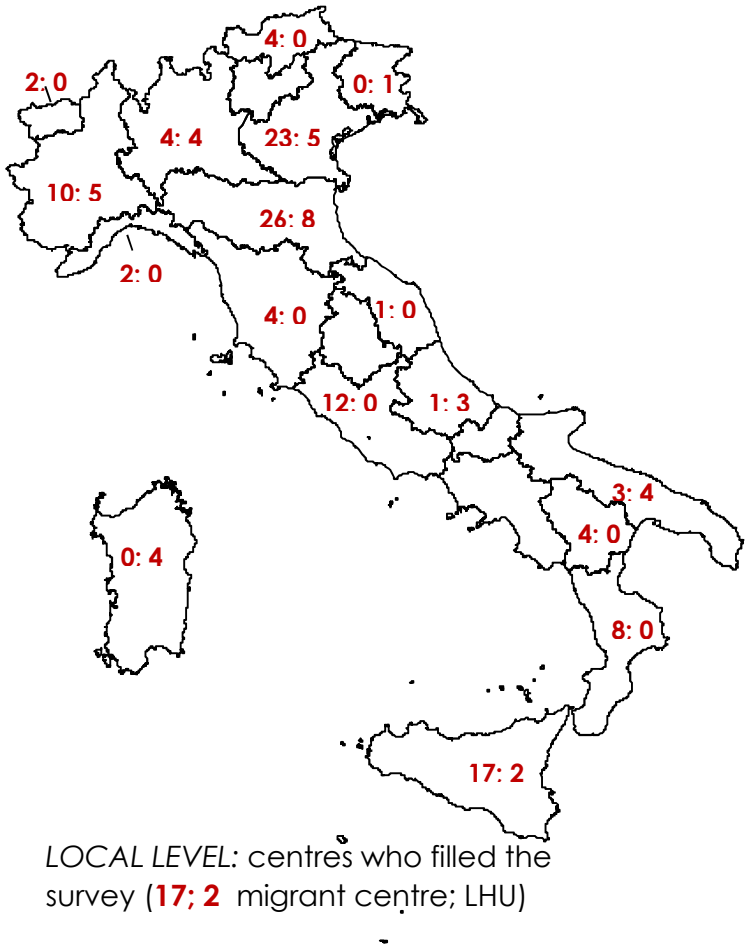
As said before, each Region sets up its own laws and regulations, in the frame of the national law, and these are transposed by LHUs, that are responsible for the provision of PHC services, including vaccination.

Migrant holding centres, instead, are ruled by regulations and standards defined by the Ministry of Interior.

According to the standard procedures described in the surveys, migrant holding centres normally inform public health centres on the number of migrants present in the centre that need to be taken over by the vaccination services. Most of the vaccinations are normally delivered by health centre staff, that decides how to organize the provision of services, whether by going to the holding centre or by making people come to the health centre.

Overall, 157 centres (121 migrant centres and 36 health centres) answered to the survey completely Figure II).

Figure II. Responding centres at local level



Migrant centres

Of the 121 migrant centres that filled the survey completely, 93 indicated that in there is no health staff working inside the centre, while 28 have it. In the latter, a health professional was asked to complete all the questions of the survey; instead, the former 93 migrant centres that do not have health care staff, were asked to fulfil a shorter survey form, containing only few information on the provision of health services for the asylum seekers hosted in

the facilities. Therefore, after an introduction on general characteristics of the responding centres, the two subgroups have been analyzed separately, and information on immunization practices has been provided only by centres with health staff.

The responding migrant centres were well distributed across the whole Italian territory. Most of the responders were CAS and SPRAR centres, but 5 surveys were filled by governmental centres (3 CARAs and 2 CIEs). Most of the centres are hosting migrants for 6 months or more. 46 of the described centres are accommodating minors (Table I).

Table I. Characteristics of migrant centres filling the survey completely.

Region	**Total (121)**	**With health staff (28)**
Aosta Valley	2	-
Piedmont	10	1
Liguria	2	1
Lombardy	4	1
Bolzano (Autonomous province)	4	-
Veneto	23	3
Emilia-Romagna	26	1
Tuscany	4	1
Marche	1	-
Latium	12	6
Abruzzi	1	-
Apulia	3	1
Basilicata	4	4
Calabria	8	1
Sicily	17	8
Type of centre		
CARA, CDA, CPSA (governmental centres)	3	3
CIE (governmental centres)	2	2
CAS	74	13
SPRAR	22	-
Centre for minors/unaccompanied minors	8	4
Other (other Hub…)	12	6
Average length of stay of migrants in the centres		
1 month	3	3
2-6 months	5	3
6 months-1 year	48	12
>1 year	62	10
Does the centre host minors?		
Yes	46	16
No	74	12

Migrant Centres without health staff

The information for 93 centres were provided by 59 professionals, most of them coordinators or managers of the centres, educators, operators, contact points for the centre, psychologists, social workers.

Most of the responding centres without internal health care staff were CAS (66%) and SPRAR (24%) (Table II).

Table II. Type of centres without health care staff

Type of centre	N° of responding centres (93)
Extraordinary hosting centres (CAS)	61
SPRAR	22
Centre for unaccompanied minors	4
Other	6

Most of the centres without health care staff have a maximum capacity of less than 50 migrants (84%), 25 of these can accommodate 10 or less migrants. 30 centres are hosting also children/adolescents, with different percentages, but all centres hosting only children have all less than 50 people. Only four centres have an outpatient clinic inside the structure (Table III).

Table III. Characteristics of migrant centres without health staff: number of migrants, minors, presence of outpatient clinic

Maximum capacity	N° of centres	N° centres hosting minors (and % of minors)	Centres with outpatient clinic inside
1 to 50	78	25 7 centres <25% 2 centres 25-50% 2 centres 50-75% 2 centres 75-100% 8 centres 100% 4 centres: it varies	4 (one with <25% minors)
51 to 150	11	3 2 centres: <25% 1 centre: 25-50%	-
More than 150	1	1 1 centre: <25%	-
(no data)	3	1 1 centre: <25%	-
Total	**93**	**30**	**4**

All centres refer to a structure providing health services outside . Most of them indicated that they refer to the community services or the structure providing prevention services (including vaccinations) of the Local Health Unit in charge of the territory where the centre is located, some added also GPs, other structures providing primary health care, and public hospitals. 27 of the responders indicated the presence of a formal agreement between the centre providing services and the migrant centre.

The provision of health services inside the structure are delivered mainly by staff from services of the Local Health Units (Table IV).

Table IV. Health services inside the centre

Who manages the health services inside the centre? (more than one answer was possible)	**N° of responding centres**
Health staff of the community services or primary health care of the LHU	73
Health staff of the vaccination services of the LHU	55
Health staff from NGOs	9
Health staff of the body/company in charge of the management of the centre	7
Other (direct access to hospitals/services, volunteers..)	3
(No data, or no services inside the centre)	*12*

For what concerns vaccination delivery, community vaccination services are usually in charge to provide check of the immunization status and vaccination delivery to migrants: 71 centres (76%) affirmed they refer to vaccination services for the check of immunization status, and 77 (83%) indicated one or more health structures that deliver vaccinations. These are again mainly public vaccination services or other public services of LHUs for the delivery of outpatient care (Table V).

Table V. Vaccination delivery

Who does check the immunization status of migrants?	**N° of responding centres**
Migrants are referred to the vaccination services in the community (LHU)	71
This centre does not deal with vaccination provision	9
Health staff working in the centre also deals with vaccination	7
Health staff comes occasionally to the centre to deal with vaccinations	1
Other	5
(no data)	2
Is there any health structure the centre refers to for vaccination delivery?	**N° of responding centres**
Yes	77
No/don't know	12
Other	2
(no data)	2
Is there a formal agreement between the structures and the migrant centre?	**N° of responding centres***
Yes	22
No/don't know	56
Other	1
(no data)	2

*Centres which answered "no/don't know" to the previous question have been excluded

Migrant Centres with health staff

The information for 28 centres was provided by 23 responders. The responders were mainly nurses, healthcare assistants, GPs, medical directors or coordinators, specialists in infectious diseases.

The responding centres with internal health care staff were mainly CAS, centres for unaccompanied minors and other similar structures located in the Italian territory. 5 governmental centres (GC), 3 CARA and 2 CIE, also filled the survey. The GCs are subject to different regulations, so we decided to analyze them separately from non-governmental ones, and as a homogenous group. (Table VI).

Table VI. Type of centres with health care staff

Type of centre		**N° of responding centres**
Non-governmental centres	Extraordinary hosting centres (CAS)	13
	Centre for minors/unaccompanied minors	4
	Other (other Hubs..)	6
governmental centres (GC)	CARA, CDA, CPSA	3
	CIE	2

Centres with higher maximum capacity are those with health personnel, although it is impossible to define a precise benchmark of capacity between centres with or without health staff. The number of migrants hosted in CAS or other non-governmental structures is very heterogenous. 16 centres are hosting also children/adolescents, with different percentages (Table VII). The governmental centres have a capacity of more than 200 migrants (210, 496, 744, 1200 and 1246, respectively), and 4 of them are hosting minors.

Table VII. Characteristics of migrant centres with health staff: number of migrants, minors

Maximum capacity	N° of centres	N° centres hosting minors (and % of minors)	
1 to 50 migrants	9	5	2 centres: <25%
			1 centre: 75-100%
			2 centres: 100%
51 to 150 migrants	11	6	5 centres: <25%
			1 centre: 25-50%
301 to 600 migrants	3	1	1 centre: <25%
Governmental Centres	5	4	4 centres: <25%
Total	**28**	**16**	

The outpatient clinic inside the structure is present mainly in structures with more than 50 places. Health services within the centres are provided mainly by staff of the body/company in charge of the management of the centre, staff from public PHC services and from NGOs. Centres hosting more people are those who are autonomous in the provision of health services (table VIII). Most centres (82%) perform a clinic health assessment at migrants' arrival in the centre, and the same amount fulfill a personal health card with health data of each migrant. Cultural mediators are available in all centres. Governmental centres are autonomous in provision of services, as requested by the national regulation for these structures [7].

Table VIII. Outpatient clinic and health services inside the structure

Maximum capacity	N° of centres	Centres with outpatient clinic inside	Who provides health services (n° of centres) (more than 1 answer possible)			Health assessment	Personal card with health data	Cultural mediators
			PHC services	NGOs	Staff of the centre			
1 to 50 migrants	9	4	3	2	4	6	7	9
51 to 150 migrants	11	10	3	2	10	9	8	11
301 to 600 migrants	3	3	-	1	3	3	3	3
Governmental Centres	5	5	1	-	5	5	5	5
Total	28	**22**	**7**	**5**	**22**	**23**	**23**	**28**

Health centres

36 health centres from 9 Regions filled out the survey. All these centres were public services (vaccination services, PHC centres, or centres of public health/prevention services).

All centres provide vaccinations, most of them to people of all ages (28). (Table IX)

Table IX. Characteristics of health centres.

Region	n°
Piedmont	5
Lombardy	4
Veneto	5
Friuli-Venezia-Giulia	1
Emilia-Romagna	8
Abruzzi	3
Apulia	4
Sardinia	4
Sicily	2
Type of centre	
Vaccination service	27
PHC outpatient service	3
Public health/prevention service	6
Age groups of people that have access to the service	
All ages	30
0-13 years	1
0-18 years	2
infants <6 and Adults > 18	1
>11 years	1
only Adults	1

A health check is performed in 23 centres, and 22 centres fill a personal card with the health data of each patient.

Cultural mediators are available in 13 centres, (4 of these centres specified that they're available on call or only for some languages). Of the remaining 23 centres, 4 explained that, if necessary, the staff of the migrant centres helps in translating.

8.3.2. Vaccination offer

Only 2 migrant centres indicated that vaccines are available in the centre. These centres are both located in Rome, Latium; a first centre is a regional Hub, managed by the Red Cross, hosting up to 414 migrants, while the second centre is a CARA, with a maximum capacity of 1200 persons.

Available vaccines are:

- 1st Centre (Hub): hepatitis B, poliovirus, tetanus, diphtheria, pertussis, HiB, influenza, MMR
- 2nd Centre (CARA): hepatitis B, poliovirus, tetanus, varicella, influenza, meningococcus C

All other responding centres refer to health centres/services, but oversee and facilitate vaccination offer for their hosts.

In all health centres vaccines are available. Vaccines against poliovirus, tetanus and MMR are available in all centres, and most of the vaccines are present in more than 90% of the centres. (Table X).

Many health centres indicated the availability of other vaccines, such as those against rotavirus and herpes zoster, or vaccines for travelers or people at risk (yellow fever, cholera, tick-borne encephalitis, rabies, Japanese encephalitis, typhus).

Table X. Available vaccines in health centres

Available vaccines	n°
Poliovirus	36 (100%)
Tetanus	36 (100%)
MMR	36 (100%)
Hepatitis B	35 (97%)
Haemophilus influenzae type b	35 (97%)
Varicella	35 (97%)
Pneumococcus	35 (97%)
Hepatitis A	34 (94%)
Meningococcus C	34 (94%)
HPV	34 (94%)
Diphtheria	33 (92%)
Pertussis	33 (92%)
Influenza	30 (83%)
Measles	24 (67%)
Rubella	24 (67%)
Mumps	24 (67%)
BCG	4 (11%)

Children/adolescents

The migrant centres hosting only adults were excluded from this section. One centre that indicated the presence of minors only > 15 years, affirmed that they do not deal with vaccination for children, and was also excluded. Therefore, the descriptive analysis is performed on 15 centres (Table XI).

10 migrant centres indicated that there is a check of immunization status, for all vaccinations included in the NIP appropriate for age. Considering the GCs, all 4 hosting children/adolescents answered positively.

8 centres indicated a laboratory testing if the immunization card and anamnesis do not give any information; two of these centres specified that this is a decision made by the vaccination services. hepatitis B, polio and tetanus are those that are tested more frequently.

One health centre indicated they do not provide services to minors, so it was excluded by this section.

Almost all health centres answered the immunization status is checked through anamnesis or vaccination card. Many centres (including the centre answering negatively), though, enlightened the difficulty of this process, due to absence of vaccination cards and, sometimes, language difficulties. 74% of the centres perform also a laboratory test if the vaccination card/anamnesis is not available. 63% of the centres check the immunization status also in this way for hepatitis B and tetanus, as it is indicated at national level, but many centres also check it for other vaccine preventable diseases.

In both type of centres some laboratory tests are performed also for screening purposes, and not only for immunization status (hepatitis C, HIV).

Table XI. Check of immunization status for children/adolescents

Is immunization status for children/adolescents checked?	Migrant centres (15)				Health Centres (35)
	1 to 50 (5)	51 to 150 (5)	301 to 600 (1)	GC (4)	
No	2	2	1	-	1
No answer	-	-	-	-	-
Yes	3	3	-	4	34
For children/adolescents <18 years	2	2		3	29
Other age limits	1 (< 5)	1 (<5)		1 (< 16)	1 (<13 years) 2 (<15 years) 1 (<16 years) 1 (<17 years)
Which vaccines					
All included in the NIP	3	3	-	4	31
Only some vaccinations	-	-	-	-	3
Tetanus, diphtheria, polio					1
Tetanus, polio, measles, rubella, varicella					1
Tetanus, diphtheria, pertussis, polio, Hib, pneumococcus, MMR					1
If there is no anamnesis or vaccination card, is the immunization status laboratory tested?					
No	2	3	1	1	9
No answer				-	-
Yes	3*	2*		3	26
Hepatitis B	1	1		3	22
Poliomyielitis	1	1		1	5[a]
Diphtheria		1			6
Pertussis	1				1
Tetanus	1	1		1	22
Measles	1			1	7
Mumps				1	4
Rubella	1			1	7[b]
Varicella	1			1	7
Hepatitis C					1
HIV					1
Meningitis ACWY					1

*one centre in each category indicated that the vaccination service decides what to do

[a] in one centre Polio is tested only for countries at risk, as indicated by the MoH

[b] in one centre rubella is tested for females only

Five migrant centres indicated they offer vaccinations to migrant children/adolescents (2 of these are the centres who also have vaccines inside), 3 GCs and two centres with a maximum capacity of 150 and 414 people. All centres offering vaccines indicated that the vaccination offer includes all the vaccines included in the NIP appropriate for age, and 2 centres indicated some vaccines as priorities. The most common procedure in the other centres is that migrants are informed on their needs and referred to vaccination services in the community.

All health centres indicated they offer vaccinations to migrant children/adolescents, 30 of them indicated no age limit for minors (Table XII) All centres but two offer all vaccinations included in the NIP appropriate for age, as it is indicated at national level. The prioritization of vaccines is very heterogeneous among the centres, with half of the centres indicating the setting of priorities, and hepatitis B, poliomyelitis, and DTP as the most prioritized vaccines (Table XII).

Table XII. Vaccination offer to migrants' children/adolescents

Are vaccinations offered to migrant children/adolescents? (more than one answer was possible)	**Migrant centres (15)**				**Health Centres (35)**
	1 to 50 (5)	**51 to 150 (5)**	**301 to 600 (1)**	**GC (4)**	
No, this centre does not deal with vaccinations	2	2			-
No, migrants are informed on their needs and referred to community vaccination services	4	2		1	-
No answer					-
Yes		1	1	3	35
For children/adolescents <18 years		1	1	2*	30
Other age limits				1 (< 16)	2 (< 15 years) 1 (< 13 years) 2 (it depends/ no answer)
Which vaccines?					
All included in the NIP	-	-	1	3	33
No answer	-	-		-	-
Only some vaccinations	-	-		-	2
Hepatitis B, Polio, Diphtheria, Tetanus, Pertussis, Hib, Pneumococcus, MMR					1
Hepatitis B, Polio, Diphtheria, Tetanus, Influenza, Meningococcus					1
Are some vaccinations considered a priority?					
No	-	-	1	2	19
No answer	-	-	-	-	1[a]
Yes	-	1	-	1	15
Hepatitis B		1		1	14
Poliomyelitis		1		1	15
Diphtheria		1		1	12
Pertussis		1		1	12
Tetanus		1		1	12
Measles		1		1	8
Mumps		1		1	5
Rubella				1	7
Varicella		1			6
MMR					7
Meningococcus C		1			7
Pneumococcus					4
Hib		1		1	3
Hepatitis A					1
Influenza					1

*one of these centre indicated also a limitation for certain countries of origin and for some risk conditions, but did not indicate which countries/risk conditions

Only one migrant centre reported a special vaccination schedule for migrants (for MMR). Most of the smaller CAS reported that there is a structure where migrants can go for vaccination services: they are informed on their vaccination needs, and dedicated social-health staff facilitate the access to vaccination services. The HUB with available vaccines inside and the GCs have also some health staff that provide vaccinations, but they still have the possibility of referring to community services for the delivery of vaccines.

86% of the health centres did not indicate, in line with the national policies, a special vaccination schedule for migrants. Four centres specified some vaccinations/conditions where there is a vaccination schedule specifically established for migrants (table XIII). Vaccinations are always delivered inside the centre. In 5 cases, it is possible that the vaccination staff goes to the holding centre, especially if the number of migrants that need to be vaccinated is high. Informed consent is required in 34 out of 35 centres, most of the times written. These centres are normally the only service providing vaccinations. Only 2 centres indicated the possibility for migrants to go to another centre if some vaccines are not available: one in a dispensary for the management of tuberculosis, and one in holding centres and other community vaccination services.

Only 2 centres indicated the presence of formal agreement between the migrant holding centres and the health centre. Instead, standard procedures for immunization practice or for guaranteeing access to immunization of children/adolescent migrants are available in 18 centres. (see Table XIII for the aspects covered by the procedures).

Table XIII. Vaccination offer to migrant children/adolescents: further information

Is there a vaccination schedule specifically established for migrants?	**Migrant centres (15)**				**Health Centres (35)**
	1 to 50 (5)	**51 to 150 (5)**	**301 to 600 (1)**	**GC (4)**	
No, they're vaccinated according to NIP	-	1	1	2	30
No answer					1
Yes (specify below for which vaccines)	-	-		1	4
DTP, Polio, Measles					1
Polio, Meningococcus C					1
Hepatitis A					1
It depends on age					1
MMR*				1	
Where are vaccinations delivered? (Question only to Health Centre) (more than one answer is possible)					
At holding centre	-	-	-	-	5
At community level (in vaccination/PHC services)	-	-	-	-	35
Who does administer vaccines? (Question only to Migrant Centre)					
PHC staff/staff of vaccination services		1		3	-
Staff of the migrant centre			1	1	-
Staff from NGOs			1		
Is informed consent required?					
Yes, written	0	0	1	2	23
Yes, verbal	0	1			11
No					1
Is there a service in the community where migrants can go if a vaccine is not administered in the centre?					

Yes	4	3	1	4	-
No	1	2			-
Are there formal agreement between migrant centres and the vaccination service?					
Yes	3		1	2	2
No/Don't know	1	3		2	3
Are there standard procedures for immunization practice or for guaranteeing access to immunization of children-adolescent migrants					
No/Don't know	2	2		1	8
Yes (specified below covered aspects)	2	3	1	3	18
Migrants are informed on their vaccination needs, but have to access to vaccination services by themselves				-	2
Migrants are informed on their vaccination needs, and dedicated social-health staff facilitate the access to vaccination services	2	3	1	2	9
A systematic information flow from holding centres to vaccination service is established	1				6
There are formal agreement between holding centres and vaccination services to facilitate the access to vaccination services	1		1	1	8

*2 doses with an interval of 4-8 weeks between doses

Adults

Two migrant centres indicated they don't accommodate adults, so they were excluded from this section. Additionally, one centre with 75-100% of minors did not give any information on vaccination to adults and was also excluded. Thereby analyses were performed on 25 centres.

Immunization status is checked only in 7 out of 25 migrant centres, and only 6 centres reported a laboratory test to check the immunization status (Table XIV). This is coherent with the fact that very few migrant centres deal with vaccination for adults directly (see Table XV).

Considering health centres, three centres indicated they do not provide services to adults, so they're not included in this section. Additionally, another centre was excluded because did not fill the questions concerning adults. Thereby the answering health centres for this section are 32.

26 (81%) of the centres affirmed they check immunization status for migrant adults, through anamnesis or check of vaccination card. One of these centres specified that this is done only for people coming from Afghanistan, and one only for people coming for countries at risk of Polio reintroduction. Like what happens for children, this process is made difficult due to unavailability of vaccination cards and unreliability of anamnestic recalls. 17 out of 26 centres check the immunization status for all the vaccinations included in the NIP appropriate for age, while 9 indicated a check only for some vaccinations (mainly Poliomyelitis, Tetanus, and Diphtheria).

12 out of the 26 centres performing check of immunization status, also provide a laboratory test, if necessary. Most test are performed for hepatitis B and tetanus, as it is indicated at national level, with some additions.

Table XIV. Check of immunization status for adult migrants

Is immunization status for adults checked?	Migrant centres (25)				Health Centres (32)
	1 to 50 (6)	51 to 150 (11)	301 to 600 (3)	GC (5)	
No	5	9	1	3	6*
Yes, to adults of all ages	1	1	2	1	24
Yes, to adults coming from specific countries of origin					2**
Yes to adults up to 30 years from Africa and Asia				1	
Yes to adults at risk		1			
Which vaccines					
All included in the NIP	1		1	2	17
Only some vaccinations		1	1	-	9
Polio		1			8
Tetanus					6
Diphtheria					5
MMR					3
Hepatitis B			1		1
BCG					1
Varicella					1
Meoningococcus C			1		
If there is no anamnesis or vaccination card, is the immunization status laboratory tested?					
No	4	9	2		14
Yes	2	1	1	2	12
Hepatitis B	1	1	1	2	11
Poliomyielitis	1			1	1
Diphtheria	1				1
Tetanus	1			1	5
Measles	1				1***
Rubella	1				2***
Mumps	1				
Varicella					1***
Hepatitis A					1
TBC		1			
Meningococcus (?)		1			

*one centre specifies that usually migrants don't have vaccination card and anamnesis is unreliable
**From Afghanistan in one centre, and from countries at risk for polio reintroduction in the other
***one centres specifies that is performed only in women of reproductive age

Twenty out of 25 migrant centres affirmed that vaccination are not offered to migrant adults. Adults are usually informed on their vaccination needs and referred to community vaccination services. Centres that deliver vaccination to adults usually offer this service only to specific target groups, like pregnant women or adults at risk for chronic diseases. An exception is represented by 2 GCs, where vaccines are administered to adults of all ages, but one administers it according to the NIP, the other limits the offer to influenza vaccine.

30 out of 32 centres indicated they offer vaccinations to migrant adults, most of them without any age limit or limit for specific conditions. (Table XV). Half of the centres provide all vaccinations included in the NIP appropriate for age, while others offer only some vaccinations (mainly vaccinations against polio and tetanus), coherently with what is indicated by the responder at national level (plus MMR). 13 centres indicated a prioritization of vaccines that are mainly polio, tetanus, diphtheria and MMR, in line with the national policies.

Table XV. Vaccination offer to migrant adults

Are vaccinations offered to migrant adults? (more than one answer was possible)	**Migrant centres (25)**				**Health Centres (32)**
	1 to 50 (6)	**51 to 150 (11)**	**301 to 600 (3)**	**GC (5)**	
No, this centre does not deal with vaccinations for adults	2	3	1	1	2
No, migrants are informed on their needs and referred to community vaccination services	4	8	1	2	-
Yes	-	2[a]	1	2	30
For adults of all ages				2	28
For adults from specific countries of origin (Afghanistan, Cameroon, Equatorial Guinea, Ethiopia, Iraq, Nigeria, Pakistan, Somalia, Syria)					1
Adults at risk (contacts of VPDs, Chronic diseases)		1	1		1
To pregnant women		1[b]	1		
Which vaccines?					
All included in the NIP	-	-	1	1	15
Only some vaccinations	-	1	-	1	15
Hepatitis B					5*
Poliomyelitis					14
Diphtheria					12
Pertussis					4
Tetanus					13
Measles					1
Mumps					1
Rubella					1
Varicella					3
MMR					6
Pneumococcus					1
Hepatitis A					1
Influenza		1		1	5**
Are some vaccinations considered a priority?					
No	-	1	1	1	17
Yes	-			1	13
Hepatitis B					6
Poliomyelitis				1	11
Diphtheria					8
Pertussis					4
Tetanus					11

Measles					3
Mumps					2
Rubella					3
MMR					5
Varicella					3

*3 centres specified that is performed only to people negative to immunization check through laboratory testing

**Only to people at risk, or to migrants living in overcrowded centres.

[a]usually not, only in particular cases as specified below

[b]the responder did not provide any other information

The migrant centres delivering vaccines usually don't have a specific vaccination scheme established for migrants. Vaccines are usually delivered by staff of the institution who oversees the centre, and written informed consent is required.

The situation is not so homogeneous as it was for children when considering the services at community level where migrants can go if vaccinations are not administered in the centre. Half of the centres (mainly small centres) don't have or don't know the presence of formal agreement between a structure at community level and the migrant centre. Half of the centres indicated the presence of standard procedures for guaranteeing access to immunization of adult migrants.

Most health centres affirmed that vaccination schedule for migrants is identical to the one established for natives. polio and tetanus-diphtheria-pertussis containing vaccines are those that are more frequently administered with a different schedule. Again, vaccinations are delivered inside the centres. More frequently than what happens for children (8 cases), it is possible that the vaccination staff goes to the holding centre, depending con logistic aspects and especially if the number of migrants that need to be vaccinated is high, and some vaccinations (pneumococcus and influenza) are provided by the GP. Informed consent is always required, written (19) or verbal (11).

Only one centre indicated an alternative place where migrants can go if vaccines are not available (the same dispensary for the management of tuberculosis that was indicated for children).

Fourteen centres indicated the presence of formal agreement between the migrant holding centres and the health centre, and standard procedures for immunization practice or for guaranteeing access to immunization of adult migrants are available in 15 centres. (see Table XVI for the aspects covered by the procedures).

Table XVI. Vaccination offer to migrant adults: further information

Is there a vaccination schedule specifically established for migrants?	Migrant centres (25)				Health Centres (32)
	1 to 50 (6)	51 to 150 (11)	301 to 600 (3)	GC (5)	
No, they're vaccinated according to NIP	-	1	1	1	22
Yes (specify below for which vaccines)	-			1*	7
DTP or DT or T					5
Polio					6
MMR					3
Hepatitis B					1
Where are vaccinations delivered? (more than one answer is possible)					
At holding centre	-	-	-	-	8
At community level (in vaccination/PHC services)	-	-	-	-	30
Who administer vaccines? (more than one answer is possible)					
PHC staff				2	-
Staff of the migrant centre		1[a]	1	1	-
Staff from NGOs			1		-
Is informed consent required?					
Yes, written		1	1	1	19
Yes, verbal				1	11
Is there a service in the community where migrants can go if a vaccine is not administered in the centre?					
Yes	4	4	2	3	-
No	2	7	1	1	-
Are there formal agreement between migrant centres and the vaccination service?					
Yes	2	2	2	1	14
No/Don't know	2	2		2	7
Are there standard procedures for immunization practice or for guaranteeing access to immunization of adult migrants					
No/Don't know	2	8	1	2	8
Yes (specified below covered aspects)	4	3	2	3	15
Migrants are informed on their vaccination needs, but have to access to vaccination services by themselves	1	1		1	2
Migrants are informed on their vaccination needs, and dedicated social-health staff facilitate the access to vaccination services	3	1		2	5
A systematic information flow from holding centres to vaccination service is established	2		1		8
There are formal agreement between holding centres and vaccination services to facilitate the access to vaccination services	2	1	2		5

*the centre did not specify for which vaccinations

[a]with the supervision of the GP

8.3.3. National/Regional regulation, Standard Operative Procedures (SOPs) and data recording

Half of the migrant centres answered that there is no national or regional regulation concerning immunization for migrants that is shared with people in the centre, and 11 centres indicated the presence of SOPs for vaccination delivery. That is coherent with the fact that many centres do not deal with vaccinations directly. Aspects that are mainly covered by these SOPs are record of the administered vaccines (10), check of the immunization status (6), record of the immunization status (5), information flow from the centre to the community level (5), procedures to facilitate migrants access to community services (5) and procedures to inform migrants on how to access to vaccination (4). Other aspects are prioritized vaccines (3), target groups (2) and logistic aspects (2).

All health centres indicated that a national or regional legal framework in vaccination offer to migrants has been shared with the health staff. The presence of SOPs for immunization practice for migrants is more heterogenous (see table XVII for further details). In addition to the answers given concerning the SOPs, five centres indicated that the procedures applied in the centre are the same of those valid for the general population, especially for children and adolescents.

Aspects covered by these SOPs are mainly record of the administered vaccines (16), check and record of the immunization status (11), prioritized vaccines (8), procedures to facilitate migrants' access to community services (7), and logistic aspects (7). Other aspects are information flow from the centre to the community level (5), target groups (4), procedures to inform migrants on how to access to vaccination (4), information flow from local to regional/national level (3) and training of health staff (3).

Table XVI. Regulation and SOPs concerning immunization practice for migrants

Has the national/regional legal framework on vaccination offer to migrants been shared with the staff of the centre? (more than one answer was possible)	**Migrant centres (28)**				**Health Centres (36)**
	1 to 50 (9)	**51 to 150 (11)**	**301 to 600 (3)**	**GC (5)**	
No/Don't know	3	8	1	1	-
Yes, as part of the national regulation for vaccination offer to the whole population (NIP)	3	2	1	3	15
Yes, a national regulation for vaccination offer specifically established for migrants	1	1			16
Yes, as part of the regional regulation for vaccination offer to the whole population	1		1		11
Yes, a regional regulation for vaccination offer specifically established for migrants	1	1			23
Are there in the Service Standard Operative Procedures (SOPs) for immunization practice or for guaranteeing access to immunization of migrants? (more than one answer was possible)					
No	6	8	2	1	12
Yes, for newborns and infants	1	2	1	4	15
Yes, for children from 6 to 10 years		1	1	4	13*
Yes, for adolescents (10 to 18 years)	1	1	1	3	12
Yes, for adults (>18 years)	1	1	1	2	11

*one centre indicated SOPs for a range from 0 to 13 years.

Although most of the migrant centres don't administer vaccines directly, the majority record information on immunization status and on vaccine administration, in different ways but mainly on individual health records that are delivered to migrants or archived in the centres, for what concerns immunization status, while information on administered vaccines are mainly recorded in electronic archives. This information is made available mainly to centres where migrants are relocated, to local health units and to GPs/Paediatricians.

Information on immunization status of migrants is recorded and made available in almost all health centres, although in different ways (Table XVIII). Data on vaccine administration are also recorded and made available by the majority of the centres (Table XIX). The way that is mainly used for recording and transmitting all these data are the electronic immunization registries where also data of the general population are recorded. The information flow, too, follows the same flow established for immunization of general population.

Table XVIII. Data on immunization status, recording and transmission

Is information on immunization status recorded?	**Migrant centres (28)**				**Health centres (36)**
	1 to 50 (9)	**51 to 150 (11)**	**301 to 600 (3)**	**GC (5)**	
No	1	6	1		1
No answer	1			1	1
Yes (specify where, more than an answer possible)	7	5	2	4	34
Individual health record delivered to migrants		2	1	1	13
Individual health record archived in the Service	6	2	2	4	12
Electronic archive dedicated to migrants	1	1	2	2	14
Paper archives dedicated to migrants	1	1		1	7
General population electronic immunization Registries					13
Is information on immunization status of migrants made available?					
No	1	6	1		7
No answer					1
Yes		5	2	5	28
It follows the same flow of the information on immunization of general population					17
To migrants' holding centres					16
To LHU vaccination services	4	4	1	3	10
To GPs and paediatricians	3	2	2	1	4
To holding centres where migrants are relocated	3	4	2	3	7
To local health authorities		1			3
To regional health authorities					7
How frequently is information made available?					
Timely	1	1	1		11
Monthly					4
Bimonthly				1	
Occasionally (e.g. on demand)	3	4	1	2	5
Other	1*			1*	2**

*when migrants are transferred to other centres

**varies for different receivers

Table XIX. Data on vaccine administration, recording and transmission

Is information on vaccine administration recorded?	Migrant Centres (28)				Health centres (36)
	1 to 50 (9)	51 to 150 (11)	301 to 600 (3)	GC (5)	
No	1	3			-
No answer	2	4		1	1
Yes (specify where, more than an answer possible)	6	4	3	4	35
General population electronic immunization Registries	2	2	3	2	25
Individual health record delivered to migrants	3	2	3	4	18
Electronic archive dedicated to migrants	2		2	2	9
Paper archives dedicated to migrants	3	3	1	2	8
General population paper archives		1		1	4
Is information on vaccine administration to migrants made available?					
No	1	2			5
No answer	2	5		1	1
Yes	6	4	3	4	30
It follows the same flow of the information on immunization of general population					18
To migrants' holding centres					16
To other LHU vaccination services	4	3	2	2	9
To regional health authorities					7
To GPs and paediatricians	3	2	2	1	5
To holding centres where migrants are relocated	1	4	3	3	6
To local health authorities		1		1	3
To international organization (IOM)			1		
How frequently is information made available?					
Timely	1	1	1		11
Monthly					4
Bimonthly				1	
Occasionally (e.g. on demand)	3	4	2	2	6
Other (varies for different receivers)					1

*on demand

One GC collected data on immunization coverage, but did not provide any additional data. Two other migrant centres of Basilicata collected data on Polio vaccines, that should have been administered to an eligible population of 27 and 59 migrants, respectively. The cycle was completed by 15 (56%) and 47 (86%) people. One centre in Tuscany also reported some data on vaccination coverage: hepatitis B and meningococcus B and C in two periods of 2016. 92 started the vaccination cycle for hepatitis B and 62 completed it; while all 193 that started vaccination against meningitis B and C completed the cycle.

Two health centres affirmed they collected data on immunization coverage of migrants, and two of them provided shared the data. One LHU located in Emilia-Romagna, where information was collected in 2016 for vaccinations to adults against tetanus, diphtheria, polio, hepatitis B, and MMR (Table XX). The second centre,

located in Friuli-Venezia-Giulia Region, collected data in 2014, on immunization coverage of minors for DTP-polio and varicella. 204 was the number of eligible children: of them, 55 were unprotected for varicella and 112 for DTP-polio. All have been vaccinated.

Table XX Immunization coverage of adults in a LHU of Emilia-Romagna, 2016

DT-IPV	**Number of migrants**	**% of the eligible (1350)**
Eligible migrants	1350	
Migrants to whom the vaccination was offered	600	44%
Migrants who started the cycle	547	41%
Migrants who completed the cycle	450	**33%**
HBV	**Number of migrants**	**% of the eligible (1000)**
Eligible migrants	1000	
Migrants to whom the vaccination was offered	459	46%
Migrants who started the cycle	364	36%
Migrants who completed the cycle	250	**25%**
MMR	**Number of migrants**	**% of the eligible (1350)**
Eligible migrants	1350	
Migrants to whom the vaccination was offered	400	30%
Migrants who started the cycle	347	26%
Migrants who completed the cycle	320	**24%**

8.3.4. Experiences and challenges

Only one migrant centre reported a vaccine shortage (one of the 2 centres with vaccines inside), but did not indicate for which vaccines.

The main challenges that were indicated at this level were scarce collaboration with other health institutions (7), low resources (6), low compliance of migrants to vaccinations (5), lacking of operative procedures (4), logistic issues (4) and the need of specific training for health care workers (3). One centre indicated waiting time, and one GC reported difficulties due to the short time of stay of migrants.

Only one health centre reported a vaccine shortage (for DT in 2016).

The main challenges that were underlined by the health centre were low resources (17), the need of specific training for health care workers (11), lacking of operative procedures (one centre specifies the need of official agreements/procedures) (8), low compliance of migrants to vaccinations (7), scarce collaboration with other health institutions (in one case with staff of migrant holding centres) (5) and logistic issues (2). Three centres added the language barriers. One centre enlightened the difficulty of dealing with migrant children due to the short time for each child, and the high frequency of relocation in different structures.

Italy Summary Box

Migrant centres

- All responding governmental centres have medical staff for provision of healthcare inside. This is in line with the requests made by the Ministry of Interior for governmental centres.
- A lot of small or less small centres without health staff inside: migrants are referred to SSN. No clear threshold between centres with/without health staff
- Great amount of migrant centres, each referring to the local services. It is important to have homogeneity in provision of services. Especially for adults, vaccination offer is very heterogeneous.

Health centres

- Immunization status checked sometimes through laboratory testing, and vaccine administration for **more** vaccines than what is indicated at national level.
- Homogeneity in the vaccination services, at least for what is requested at national level.

Standard procedures

- Not indicated at national level, sometimes at local level, for children and less frequently for adults (and no formal agreement).

Challanges

- Scarce collaboration with other health institutions and lacking of operative procedures (in line with what said before), low resources, low compliance of migrants to vaccination.

9. Country profile: Malta

9.1. General overview of the country

9.1.1. Overview of the health system

In Malta, the public health care system is the key provider, offering a comprehensive basket of services to all persons residing in Malta who are covered by the Maltese social security legislation and to groups such as irregular immigrants and foreign workers. There are no user charges or co-payments for health services. The private sector complements the provision of health services, in particular in the area of primary health care, and there is some involvement by the Catholic Church and voluntary organizations to provide long-term and chronic care services. The state health service and private GPs provide primary health care services, although independently from one another as the latter account for two-thirds of the workload. Secondary and tertiary care is mainly provided by specialized public hospitals of varying sizes. When it comes to the provision of highly specialized care, patients are sent overseas because it would neither be cost-effective nor feasible to conduct such treatment locally [5].

9.1.2. Vaccine administration

In Malta vaccinations are administered to newborns, children and adolescents under 18 years by primary care service. 90% of delivery is performed by public health system, and 10% privately.

95% of people aged 18 years and more are vaccinated in public primary care services, the remaining 5% in private facilities.

9.1.3. Reception of newly arrived migrants

According to the UNHCR Office in Malta, the island received 12,980 migrants arriving by boat since year 2006. Over the last 4 years Malta received also a total of 2,690 migrants who reached Malta through other means of transport.

The number of asylum seekers arrived in Malta in 2016 (up to September) was 1,700 [1]. After their arrival, asylum seekers are referred to a reception centre, where they present their request for asylum at refugee commissioners and are then sent for a health screening. When this process is cleared, they move then to 6 open centres and, in the first few days after their landing, a first health screening is performed. Broadly speaking these centres can be divided into those addressing the needs of vulnerable persons, these usually being smaller centres, and those addressing the needs of persons not considered vulnerable, generally being single adult males.

Migrants move into the community within a year. Many migrants in Malta live in the community in rented properties. Some migrants, who are unemployed, live in groups of 5-6 persons in one apartment and share living expenses. Many of them help each other when one's employment contract is terminated and he/she is searching other work opportunity [6].

9.2. Immunization policies at the national level – National survey

The national questionnaire was filled by a MD public health officer of the "Infectious disease prevention and Control Unit".

Immunization of migrants is supported by a recommendation produced by the Advisory Committee on Immunization Policy, that was issued in 2012.
Asylum seekers from 0 to 16 years, are offered vaccinations against poliovirus, tetanus, diphtheria, pertussis, haemophilus influenzae type b and measles-mumps-rubella, with the same vaccination scheme applied to natives. The first dose of each vaccine is given at the holding level and, if a course is needed, this is carried out in the community health centres. Adults (including minors from 16 to 18 years) receive one dose of tetanus, diphtheria, and poliovirus at the holding level. Vaccine against poliovirus is considered a priority in the vaccination offer both for adults and migrants. A special attention is given to people coming from certain countries of origin: Sub-Saharan Africa and war-torn countries.

In Malta there are no standard operative procedures for immunization practice for migrants, nor for facilitating adult migrants' access to vaccination at the community level, but they are informed on their needs for further vaccinations and on where to go to receive the vaccine. This would be the health centre closest to his/her place of residence after leaving the reception centre.

9.3. Immunization practices at the local level – Local survey

9.3.1. General information on responding centre

A General Practitioner answered at the questionnaire for health centres. The health facility to which the information is referred is a primary care service of the National Immunization Service.

Health centre

In the health centre, primary care services are provided to newborns, adolescents and adults. Vaccines are available against the following infections: hepatitis B, poliovirus, tetanus, diphtheria, pertussis, hepatitis A, Hib, BCG, varicella, influenza, HPV, MMR.

The role of immunization nursing staff is limited to vaccine administration. Cultural mediators are available in the service only on certain days and times.

9.3.2. Vaccination offer

Children/adolescents

The first doses of each vaccination are delivered at reception centre, before migrants are dispersed to different open centres.

Relocators are seen at Qormi Health Centre (informed of the appointments by Chest Unit) where checking of immunization status and vaccination according to schedule is carried out. Other asylum seekers are informed to attend the Immunization centre in Floriana health centre

If more than one dose is required, migrants are usually given a card with a date when vaccine is due and are sent to one health centre, where immunization status for all children/adolescents under 16 years of age is checked through anamnesis and check of immunization cards, for all vaccinations included in the NIP. The national level, describing what happens at reception centres, indicated check of immunization status for some vaccines only (Table 4). No laboratory testing is performed if the immunization status is unknown.

After the check of immunization status, in case of susceptible children or with undocumented status, some vaccinations are offered to children/adolescents under 16 years of age: polio, tetanus, diphtheria, and MMR, with vaccination against polio considered a priority. Pertussis and Hib are given to children under 10 years of age only,

in combination with DT. Between 10 and 16 years pertussis and Hib are not administered. In contrast to what expected at National level, informed consent is not required before performing the vaccination. There is a specific immunization schedule (not reported at national level) for migrant adolescents (10-16 years) that receive one dose of dT-IPV and MMR.

Adults

In the health centre the immunization status of adults of all ages is checked through anamnesis or check of vaccination card for polio only. Vaccination is then offered to adults of all ages against polio, dT, and also in this category polio vaccination is considered a priority. This vaccination schedule is specific for migrant adults, the citizens of Malta receive it only from 14 to 16 years. No informed consent is requested. As reported at national level, migrant adults receive vaccination only during their stay at the reception centre, where it is easier to reach all the individuals, and not at community level. If further vaccinations are needed, migrants are informed about their need and are referred to public health centres.

9.3.3. National regulation, Standard Operative Procedures (SOPs) and data recording

The responder indicated that the national regulation/legal framework specifically established for migrants is shared with the staff of health centre and supports immunization of migrants.

Data on immunization status are recorded on individual health records, given to migrants and archived in the Service. These data are also made available at the community vaccination services through a national immunization electronic database.

Then, data on administered vaccines are recorded both in the individual immunization cards and in a national electronic database (the same used for the general population), but this information is not made available to other centres or institutions. No data on migrants' compliance or on vaccination coverage are recorded.

9.3.4. Experiences and challenges

The responder indicated no experiences of vaccination shortages.

Speaking of challenges, in addition to the low resources that was indicated also at national level, the responder underlined the need of specific training of health care workers on migrants' health.

Malta Summary Box

- Some discrepancy between policies and practices.
- Differences in the check of immunization status and vaccination offer indicated in the national and local questionnaire for children (adults same vaccination offer)
- Informed consent: expected in policies, not provided in practices
- Different vaccination schedule (reported only at local level) for children and adults compared to schedule for natives
- No Standard Operating Procedures reported.
- Challenges: low resources (perceived both at national and Local level) and specific training

10. Country profile: Slovenia

10.1. General overview of the country

10.1.1. Overview of the health system

Slovenia has since 1992 a Bismarckian type of a social insurance system, based on universal statutory health insurance, fully regulated by national legislation. Experts from the Ministry of Health have a supervisory and controlling role. Since 1992, the previously exclusively publicly financed system has been transformed into a mixed system where private sources of funding have become significant, reaching 27.8% in 2006. Another important feature of today's health system in Slovenia is the growing share of private providers, especially in primary and specialist health care. Although most of the care delivery is still carried out by state-owned services, the privatization has led to increasingly complex contracting arrangements, and a higher fragmentation in provision [5].

10.1.2. Vaccine administration

In Slovenia vaccination is administered to children and adolescents under 18 years by primary care services, with a proportion of 70% in public health services and 30% privately.

Adults receive vaccinations in a proportion of 40% in public vaccination services and 50% in primary care services/workers (40% public and 10% private), while 10% of vaccinations are administered by occupational medicine services.

10.1.3. Reception of newly arrived migrants

During the second part of year 2015, migrants coming from Syria, Iraq and Afghanistan passed from Greece through Balkan countries and entered Schengen area at the eastern Slovenian border to continue the route to Germany. Relatively suddenly Slovenia, a two million people country, faced the challenge of needs of nearly half a million mainly exhausted individuals. Civil protection of Slovenia was in charge to organize basic care for migrants, and many Slovenian NGOs and charity organizations were engaged. Public health servants were invited to help in daily activities. The basic needs of migrants were covered and provisional shelters to stay during the night were raised. Health care is given according to the demand of migrant population by local primary health centres. Before March 2016, approximately 32,000 migrants entered, and most of them left the country in few days. Very few of them considered Slovenia as their final destination, and only a small number opted for asylum in Slovenia [4,6].

The migratory pressure at the European external borders (from Turkey, across Greece, Balkan and up to western Europe) has been constantly easing since winter 2016 [1], and the amount of asylum seekers arriving to Slovenia collapsed. As a consequence, Slovenian reception and accommodation centers were closed during the period of time the questionnaire was administered. From March to December 2016, 1,308 migrants asked for asylum in Slovenia, but a lot of them already left the country. The data regarding applications for asylum are public available and updated, but there are no public available updated data how many of them already left the country.

All activities regarding asylum seekers are being coordinated and ordered by the Ministry of Internal Affairs, which also includes the system of health services for asylum seekers. There are legal premises for asylum seekers, which are defined as obligations in the field of health care:

- prescribed content of the first medical examination upon entering the center;
- the extent of provided preventive health activities for children up to 18 years of age and for pregnant women.

The latter have the same rights to health care as do the Slovenian citizens. All other asylum seekers have a guaranteed basic and specialist medical service within the frame of emergency medical conditions. The centers for asylum seekers have a guaranteed clinic service and there is an agreed payer and contracted organized services that meet the requirements.

10.2. Immunization policies at the national level – National survey

The national questionnaire was filled by a public health expert from the Slovenian National Institute of Public Health.

In Slovenia, there is a law that is an international act on migration, in which only the main rights to health care are listed (http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4911- last version 2016). All the details, also those concerning immunization, are in other policies, acts, guidelines. Immunization is not specifically mentioned in the law, but is included in the message that the same rights apply to asylum seeking children and native children.

Consequently, asylum seekers from to 0-18 years, are offered all the vaccination included in the National Immunization Plan appropriate for age, with the same vaccination scheme applied to natives. Instead, vaccination to adults is offered only if there is an epidemiological recommendation.

Immunization policies targeting migrants are homogeneous in the whole country.

Vaccines are delivered at community level. Standard operative procedures for immunization practice of children-adolescent migrants are available at holding centres and at community level, while no standard procedures for facilitating migrants' access to vaccination at the community level are in place.

10.3. Immunization practices at the local level – Local survey

10.3.1. General information on responding centres

An epidemiologist from the National Institute of Public Health (NIJZ) answered both the local questionnaires, reporting the information from the point of view of a public migrant holding centre, managed by institutions/individuals contracted by the Ministry of Interior, and of a Health Centre, providing primary health care services. Both centres are located in Ljubljana.

Migrant centre

The centre is active since 2004 and has a maximum capacity of 203 migrants. At the moment the survey was filled, it hosted 157 asylum seekers, including minors of all ages in a proportion that varies between 25% and 50%. Migrants stay in this centre 2-6 months on average. Cultural mediators are available.

In the holding centre are provided health care services, managed by health care staff of the institution in charge of the Centre, staff from Primary Health Care centres and staff from NGOs. The HCWs perform clinical

assessment of migrants and record individual information in individual health records. Vaccines are not available in the centre.

Health centre

In the health centre, primary care services are provided by GPs and pediatricians to children and adolescents under 18 years of age. Vaccines available in the centre are against the following infections: hepatitis B, poliovirus, tetanus, diphtheria, pertussis, hepatitis A, HiB, varicella, influenza, pneumococcal, HPV, MMR.

The staff of the centre performs clinical assessment of migrants and records information regarding each examined migrant in individual health records. No cultural mediators are available in the service.

10.3.2. Vaccination offer

Children/adolescents

For minors (less than 18 years old) every asylum holding centre has an allocated health center nearby and a doctor who provides care, that, according to the law, provides both health prevention services and medical care in case of illness, and is the same as the one for the Slovenian citizens. Minors are sent to a dedicated doctor who is responsible to provide the vaccination according to NIP and national guidelines.

Immunization status for children/adolescents is checked during the clinical health assessment, through anamnesis and check of immunization cards, mostly in the referred health centre and sometimes in the migrant centre. No laboratory testing is performed if the immunization status is unknown. These practices are in line with the policies described at National level, that indicated a check both at holding level (migrant centre) and community level (health centre).

Dedicated staff facilitate the access of all children to the pediatrician at the community level, where the immunization status is checked. After the check of immunization status, migrants are informed on their vaccination needs. All vaccinations included in the NIP appropriate for age are offered, and are administered in health centre only. Verbal informed consent is required to migrants or to their parents. The immunization schedule is identical to that used for Slovenian general population and no vaccines are considered a priority. The administration of vaccine is recorded on the community level-paper registry, and all vaccinated persons receive the individual vaccination cards with recorded vaccinations. A formal agreement stipulates the cooperation between migrant hosting centres and health centres.

Adults

Like what was reported in the questionnaire at National level, no vaccinations are offered to adult migrants, unless there is a specific epidemiological indication, according to the Contagious Diseases Act. In case of an epidemic threat, vaccinations are considered an emergency medical treatment, and are carried out by doctors in the emergency medical facilities or health centers.

10.3.3. National regulation, Standard Operative Procedures (SOPs) and data recording

Both in the migrant centre and in the health centre the national regulation or legal framework supporting immunization of migrants is shared with the staff of the service.

Also, in both centres as well as at national level, there are guidelines regarding migrants' immunization, but no SOP for guaranteeing access of migrants to vaccinations.

Data on administered vaccines are recorded only in the health centre-paper registry, where vaccinations are administered –both in case of vaccination of children based on immunization program or in case of epidemiological indication for children and/or adults. Although data on administered vaccines and on vaccination coverage are available and, if necessary, could be collected at national level, currently a system for collecting these data is not established, due to the very small number of asylum seeking children in the country.

If there is an epidemiological indication, the vaccination of children and/or adults will be implemented according to Contagious Diseases Act.

10.3.4. Experiences and challenges

The responder indicated no experiences of vaccination shortages.

The main challenges indicated are the low compliance of migrants to vaccination in the health centre and in the migrant centre, since most of the asylum seekers leave the country before the vaccine program is completely fulfilled, and there are no data of their further destinations.

Slovenia Summary Box

- There is full coherence between national policies and local practices, also given the small number of migrants present in the country at the moment the survey was filled.
- Experience and challenges that have been indicated at local level (practice): low compliance of migrants to vaccination; most of the asylum seekers leave the country before the vaccine program is completely fulfilled, and there are no data of their further destinations.
- Information on administered vaccines are available only at local level , for regular vaccination for children and in case of epidemiological indication
- Improvements of interdisciplinary cooperation in vaccination implementation (suggested by the responders themselves):

a) General population electronic Immunization Registry to be upgraded
b) Strengthening the checking of the immunization status.
c) Informing and raising the awareness of migrants regarding their vaccination needs.

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