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EUR-HUMAN

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EUR-HUMAN project
WP3: Review of literature and expert knowledge

Deliverable 3.1. Preliminary findings

Promoting the health of refugees and other migrants in the context of short-term arrival and long-term settlement: effective measures and interventions and the factors that promote or hinder their implementation in European health care settings?

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About this report

A primary objective of the EUR-HUMAN project is to identify, design, assess and implement measures and interventions to improve primary health care delivery for refugees and other migrants with a focus on vulnerable groups. The current report, Deliverable 3.1, briefly summarizes the overall status of the third work package (WP3) of the EUR-HUMAN project after three months. The aim of this report is to contribute to the discussion and knowledge exchange between partners of the EUR-HUMAN project. The document gives an overview of the methodology, an example of the early results based on a non-systematic selection of works, and implications formulated against the background of key documents. The report complements the knowledge about the tools and guidelines created in WP4 and WP5. Also, it gives the consortium an opportunity to determine whether the current way of analysing and presenting information is sufficiently informative in the light of the overall objectives of the EUR-HUMAN project and its distinctive WPs.

At the moment the NIVEL-team is screening approximately 250 full-text articles. The preliminary findings are the result of an analysis of selected articles. A heuristic framework is described and partly tested. In a later stadium the partners will assist with the analysis of non-English and non-Dutch documents. An online survey to collect information on best practices is currently being disseminated with help from the partners. Expert interviews are planned to take place by the end of April/beginning of May to verify the findings from the review and surveys .

Finally, concerning the terminology, terms as refugees, migrants, asylum seekers, stateless persons have different meanings in different contexts. In this document the phrase "refugees and other migrants" is used, conform the Grant agreement.

1. Background and general objective of the EUR-HUMAN project

The international refugee crisis has reached a critical point and many European countries are developing policy and plans to better define their role in supporting refugees entering Europe. A primary objective of the EUR-HUMAN project is to identify, design, assess and implement measures and interventions to improve primary health care delivery for refugees and other migrants with a focus on vulnerable groups. Tools and practice guidelines are developed for the initial health care needs assessment of arriving refugees (covering their mental, psychosocial and physical health). Intervention models will be tested in the six implementation sites in six different countries. There is a strong need to collect and share information about the most effective structures and programmes to improve health care.

The focus of the EUR-HUMAN project is placed particularly on strengthening primary health care. Primary health care is the first point of entry for refugees and other migrants. The objective is to provide good and affordable comprehensive person-centred and integrated care for all ages and all ailments, taking into account the trans-cultural setting and the needs, wishes and expectations of the newly arriving refugees, and to ensure an equal service delivery as the local population where appropriate . Additionally, the EUR-HUMAN project aims to positively influence the working conditions and satisfaction of local and refugee health care workers, as well as the interaction and collaboration between three key groups: refugees and other migrants, health care professionals, and host communities.

2. WP3 objectives

In recent years, several initiatives started to synthesize available evidence on effective health care interventions for refugees and other migrants, the core target group of the EUR-HUMAN project. WP3 aims to provide a comprehensive overview of effective interventions to address health needs and risks of refugees and other migrants in European countries, focusing on short-term arrival while anticipating on long-term settlement. Existing knowledge from the literature and experts is collected and synthesized systematically. Practical implications and implementation challenges are addressed, whilst taking into account characteristics of health systems in different countries (including the roles of health care professionals), the position of countries in the cross-European migration and settlement chain, and relevant contextual factors.

One of the primary objectives of WP3 is to bring together knowledge from different sources in a structured way. WP3 and WP2, will provide valuable input to WP4 and WP5 in order to propose an integrated, practical and feasible intervention package for implementation in the context of the project. This intervention package is probably multifaceted but, regardless of its nature and content, it preferably is (a) addressing at least four health domains within the refugee and migrant population: infectious

diseases, mental health and psychosocial problems, women and reproductive health, and chronic illness; (b) feasible for and useful to local health actors and service providers; (c) cross-nationally (and inter-culturally) applicable within the EU; (d) useful in an international "refugee-chain perspective"; (e) based on the strongest available scientific evidence.

The nature of the intervention package is an essential part of the EUR-HUMAN assignment. Special attention is given to the extent to which interventions and measures are applicable to different local European contexts. A good understanding of factors that determine success or failure of an intervention and measure in a particular setting is invaluable for decision-making on the design and composition of the intervention package.

With the ambition to promote the health of refugees and other migrants, especially those coming from Middle East and Africa, in the context of short-term arrival and long-term settlement, objective of WP3 is to learn from literature and experts on measures and interventions and the factors that help or hinder their implementation in European health care settings.

3. Heuristic framework

Before going deeper into the methods in section 4, this section presents the heuristic framework used to analyse the collected material. To enlarge the chance that promising measures and interventions are of practical use within the EUR-HUMAN project, the heuristic framework is comprised of sources in three categories: primary care oriented health care models, evidence-based guidelines, and implementation science models.

Table 3.1. Heuristic framework: sources in three categories

Category	Source
Primary care oriented health care models for refugees and other migrants (§3.1)	● Strategic objectives UN refugee agency UNHCR (UNHCR, 2014) ● Workflow primary health care for refugees and other migrants (EUR-HUMAN, 2016) ● Personal health record and handbook (European Union, IOM, 2015)
Evidence-based guidelines (§3.2)	● ECDC Evidence Based Migrant Health Guideline (Pottie et al., 2011)
Implementation science models (§3.3) *(complementary to the models adopted by WP2, WP4, WP5 and WP6: PLA* and NPT)	● Practical, Robust Implementation and Sustainability Model (PRISM) (Feldstein & Glasgow, 2008) ● Checklist for identifying determinants of practice (Flottorp et al., 2013) ● Community action model (Lavery et al., 2005)

3.1 Primary care oriented health care models for refugees and other migrants

Strategic objectives UNHCR
The UNHCR's "*Regional public health care and nutrition strategy for Syrian refugees"* includes 10 strategic objectives:

1. Support adequate triage, health screening and age-appropriate immunization of new arrivals
2. Support access to comprehensive primary health care (combination of curative and preventive health care, community-based; primary care first base of contact, available for a long term)
3. Decrease morbidity from communicable diseases and outbreaks
4. Support childhood survival and expanded programme for immunization
5. Support integrated prevention and control of non-communicable diseases and mental health
6. Support access to comprehensive reproductive health services
7. Support access to nutrition services (including breast feeding)
8. Support access to secondary and tertiary health care
9. Maintain and expand health information systems including information on access, uptake and coverage of services
10. Coordination (of the decentralized, action-driven approach aimed at health and nutrition; responsibility of Ministries of Health)

Several core themes and principles of the EUR-HUMAN project are reflected in these objectives: the health themes, the focus on primary care and community-based care, timely detection of risk/vulnerable groups, and a stepped care approach permitting access to more specialized health services where applicable.

Workflow primary health care for refugees and other migrants
Within the EUR-HUMAN project a workflow with three domains is developed, illustrating how health needs of population groups are addressed by, initially, health care professionals trained for triage and later by primary care teams. Figure 3.1 suggests the creation of a primary health care unit at the existing refugees and immigrants hosting centres. In the first domain urgent cases are identified and separated from non-urgent cases. The second domain starts with an assessment of vaccination coverage and followed by an assessment of care needs concerning chronic illness, mental illness, children, and women with reproductive issues. In the third domain a tailored health education and promotion programme is implemented for refugees and other migrants with urgent conditions.

The workflow is applicable to situations in countries where refugees enter the European Union, in transfer countries and in destination countries.

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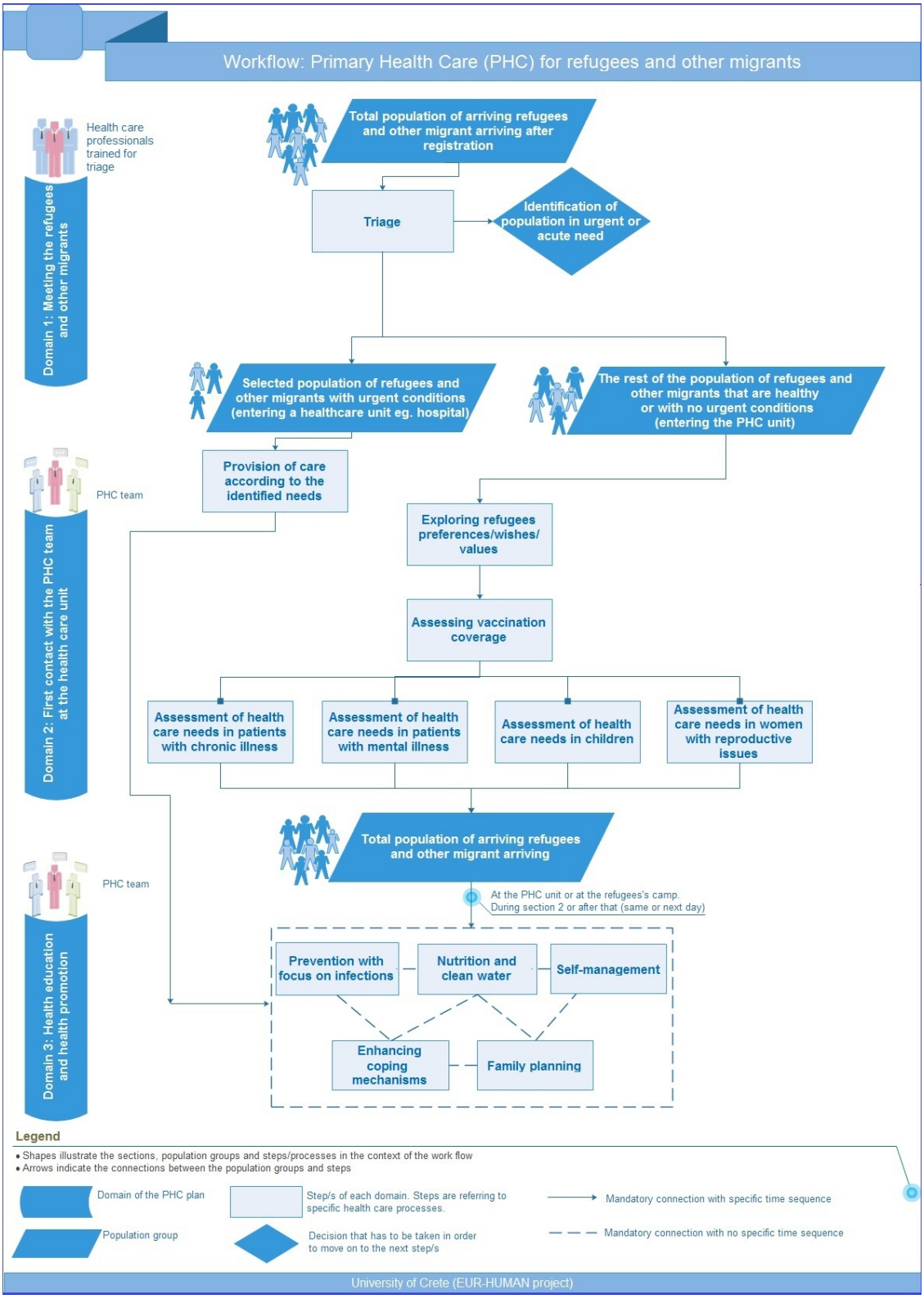
Figure 3.1. Workflow primary health care for refugees and other migrants



Personal health record and handbook
The 'Personal Health Record' was developed by the Migration Health Division of the International Organization for Migration with the support from the European Commission and the contribution from the European Centre for Disease Prevention and Control. The record is a personal document. It includes in one single document the health data and information that will help the health professionals get a comprehensive view of a person's health status and needs. Refugees and other migrants will have to keep the document with them to help them in further contact with health professionals while traveling through Europe. The medical check is voluntary and the content of this document is confidential. It is covered by European and national regulations on data protection (European Union, IOM 2015).

3.2 Evidence-based guidelines
In recent years, there has been an increase in development of practice guidelines for refugees and other migrants. In the development of the ECDC Evidence-Based Migrant Health Guideline, the authors followed the internationally recognized Appraisal of Guidelines for Research and Evaluation (AGREE; www.agreetrust.org). They selected guideline topics using a literature review, stakeholder engagement and the Delphi process with equity-oriented criteria. A 14-step evidence review process was used to validate tools to appraise the quality of existing systematic reviews, guidelines, randomized trials and other study designs.

The ECDC guidelines are different from other guidelines because the developers insisted on finding evidence for clear benefits before recommending routine interventions (Pottie et al., 2011). For example, in the ECDC guidelines for post-traumatic stress disorder, intimate partner violence and social isolation in pregnancy, the authors recommend not conducting routine screening, but rather remaining alert. With regard to screening for asymptomatic intestinal parasites, they recommend focusing on serologic testing for high burden of disease parasites, rather than traditional testing of stool for ova and parasites.

Although the guidelines are currently being updated they are a convenient point of reference for the data collection in this work package. Table 3.2 provides a summary of evidence-based recommendations for the four health domains, adopted from the original source (Pottie et al., 2011).

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Table 3.2. ECDC Evidence-Based Migrant Health Guideline: Summary of recommendations

ECDC Evidence-Based Migrant Health Guideline: Summary of recommendations
Mental health/psychosocial care *Depression* - If an integrated treatment program is available, screen adults for depression using a systematic clinical inquiry or validated patient health questionnaire (PHQ-9 or equivalent). - Individuals with major depression may present with somatic symptoms (pain, fatigue or other nonspecific symptoms). - Link suspected cases of depression with an integrated treatment program and case management or mental health care. *Post-traumatic stress disorder* - Do not conduct routine screening for exposure to traumatic events, because pushing for disclosure of traumatic events in well-functioning individuals may result in more harm than good. - Be alert for signs and symptoms of post-traumatic stress disorder (unexplained somatic symptoms, sleep disorders or mental health disorders such as depression or panic disorder). *Child maltreatment* - Do not conduct routine screening for child maltreatment. - Be alert for signs and symptoms of child maltreatment during physical and mental examinations, and assess further when reasonable doubt exists or after patient disclosure. - A home visitation program encompassing the first two years of life should be offered to immigrant and refugee mothers living in high-risk conditions, including teenage motherhood, single parent status, social isolation, low socioeconomic status, or living with mental health or drug abuse problems. *Intimate partner violence* - Do not conduct routine screening for intimate partner violence. - Be alert for potential signs and symptoms related to intimate partner violence, and assess further when reasonable doubt exists or after patient disclosure. Note: PHQ-9 = nine-item Patient Health Questionnaire. *Order of listing considers clinical feasibility and quality of evidence.
Women's health *Contraception* - Screen immigrant women of reproductive age for unmet contraceptive needs soon after arrival. - Provide culturally sensitive, patient-centred contraceptive counselling (giving women their method of choice, having contraception on site and fostering a good interpersonal relationship). *Vaccination against human papillomavirus* - Vaccinate 9- to 26-year-old female patients against human papillomavirus . *Cervical cytology* - Screen sexually active women for cervical abnormalities by Papanicolaou (Pap) test. - Information, rapport and access to a female practitioner can improve uptake of screening and follow-up. *Order of listing considers clinical feasibility and quality of evidence.

ECDC Evidence-Based Migrant Health Guideline: Summary of recommendations

Chronic and noncommunicable diseases

Type 2 diabetes mellitus

- Screen immigrants and refugees > 35 years of age from ethnic groups at high risk for type 2 diabetes (those from South Asia, Latin America and Africa) with fasting blood glucose.

Iron-deficiency anemia

- Women: Screen immigrant and refugee women of reproductive age for iron-deficiency anemia (with hemoglobin). If anemia is present, investigate and recommend iron supplementation if appropriate.
- Children: Screen immigrant and refugee children aged one to four years for iron-deficiency anemia (with hemoglobin). If anemia is present, investigate and recommend iron supplementation if appropriate.

Dental disease

- Screen all immigrants for dental pain. Treat pain with nonsteroidal anti-inflammatory drugs and refer patients to a dentist.
- Screen all immigrant children and adults for obvious dental caries and oral disease, and refer to a dentist or oral health specialist if necessary.

Vision health

- Perform age-appropriate screening for visual impairment.
- If presenting vision < 6/12 (with habitual correction in place), refer patients to an optometrist or ophthalmologist for comprehensive ophthalmic evaluation.

*Order of listing considers clinical feasibility and quality of evidence.

Infectious diseases

Measles, mumps and rubella

- Vaccinate all adult immigrants without immunization records using one dose of measles–mumps–rubella vaccine.
- Vaccinate all immigrant children with missing or uncertain vaccination records using age-appropriate vaccination for measles, mumps and rubella.

Diphtheria, pertussis, tetanus and polio

- Vaccinate all adult immigrants without immunization records using a primary series of tetanus, diphtheria and inactivated polio vaccine (three doses), the first of which should include acellular pertussis vaccine.
- Vaccinate all immigrant children with missing or uncertain vaccination records using age-appropriate vaccination for diphtheria, pertussis, tetanus and polio.

Varicella

- Vaccinate all immigrant children < 13 years of age with varicella vaccine without prior serologic testing.
- Screen all immigrants and refugees from tropical countries ≥ 13 years of age for serum varicella antibodies, and vaccinate those found to be susceptible.

Hepatitis B

- Screen adults and children from countries where the seroprevalence of chronic hepatitis B virus infection is moderate or high (i.e., ≥ 2% positive for hepatitis B surface antigen), such as Africa, Asia

ECDC Evidence-Based Migrant Health Guideline: Summary of recommendations

and Eastern Europe, for hepatitis B surface antigen, anti-hepatitis B core antibody and antihepatitis B surface antibody.
- Refer to a specialist if positive for hepatitis B surface antigen (chronic infection). Vaccinate those who are susceptible (negative for all three markers).

Tuberculosis
- Screen children, adolescents < 20 years of age and refugees between 20 and 50 years of age from countries with a high incidence of tuberculosis as soon as possible after their arrival in Canada with a tuberculin skin test. If test results are positive, rule out active tuberculosis and then treat latent tuberculosis infection.
- Carefully monitor for hepatotoxity when isoniazid is used.

HIV
- Screen for HIV, with informed consent, all adolescents and adults from countries where HIV prevalence is greater than 1% (sub-Saharan Africa, parts of the Caribbean and Thailand).
- Link HIV-positive individuals to HIV treatment programs and post-test counselling.

Hepatitis C
- Screen for antibody to hepatitis C virus in all immigrants and refugees from regions with prevalence of disease ≥ 3% (this excludes South Asia, Western Europe, North America, Central America and South America).
- Refer to a hepatologist if test result is positive.

Intestinal parasites
- Strongyloides: Screen refugees newly arriving from Southeast Asia and Africa with serologic tests for Strongyloides, and treat, if positive, with ivermectin.
- Schistosoma: Screen refugees newly arriving from Africa with serologic tests for Schistosoma, and treat, if positive, with praziquantel.

Malaria
- Do not conduct routine screening for malaria.
- Be alert for symptomatic malaria in migrants who have lived or travelled in malaria-endemic regions within the previous three months (suspect malaria if fever is present or person migrated from sub-Saharan Africa). Perform rapid diagnostic testing and thick and thin malaria smears.

*Order of listing considers clinical feasibility and quality of evidence.

(Source: ECDC Evidence Based Migrant Health Guideline; Pottie et al., 2011)

3.3 Implementation science models

Three models play a role in the analysis and the formulation of recommendations aimed at enlarging the success chances of the implementation of measures and interventions on behalf of refugee health care.

PRISM - Practical, Robust Implementation and Sustainability Model

Feldstein et al. (2008) described how a comprehensive model for translating research into practice was developed using concepts from the areas of quality improvement, chronic care, the diffusion of innovations, and measures of the population-based effectiveness of translation. PRISM (the Practical, Robust Implementation and Sustainability Model) evaluates how the health care program or intervention interacts

with the recipients to influence program adoption, implementation, maintenance, reach, and effectiveness. PRISM considers how the program or intervention design, the external environment, the implementation and sustainability infrastructure, and the recipients influence program adoption, implementation, and maintenance (Feldstein et al., 2008).

Checklist for identifying determinants of practice
Flottorp et al. (2013) identified seven dimensions of factors that help or hinder the implementation: (1) characteristics of health care measure or intervention, (2) characteristics of health care providers, (3) characteristics of refugees/migrants, (4) professional interactions, (5) incentives and resources, (6) local capacity for organisational change, (7) particular social, political and legal factors.

Community action model
This cycle-model is not used in WP3 but in the overarching EUR-HUMAN project. At a certain stage interventions and measures are selected and combined with an implementation strategy. The output of the current work package has to be merged within the stepwise approach together with the output of activities in the other WPs.

4. Methods

WP3 seeks to learn from literature and experts on measures and interventions and the factors that help or hinder their implementation in European health care settings. Three data sources are accessed for this purpose, because by focusing solely on the literature it is very likely that valuable, practical information is going to be missed: a scoping review (§4.1), an online survey (§4.2), and expert interviews (§4.3).

4.1 Scoping review
The systematic search of the literature provides insights into the existing scientific evidence for the implementation of assessment tools, intervention strategies and preventive measures in the various health domains of the EUR-HUMAN project. Searches were performed in Pubmed, Embase, Cochrane, PsycINFO, PILOTS and Sociological Abstracts.

Search-strings were formulated in English and are a combination of two building blocks. The first part contains a combination of search terms related to the target group of the EUR-HUMAN project: e.g. refugees, migrants and asylum-seekers. The second part is based on earlier systematic reviews, published in peer reviewed journals such as Implementation Science (e.g. Chaudoir et al., 2013). After elaborately testing the search string the data collection strategy was improved. Additional synonyms were added, in plural and singular forms. Moreover, the search was verified by a review specialist from the Cogis library, which is part of the Dutch national knowledge centre on the psychosocial effects of war, violence, persecution, and humanitarian crises. The search

was mildly adjusted to the interfaces of the databases completed on the 29th of February, 2016. The PubMed search string is included in Table 3.3.

Table 3.3. Example of the search string as it was entered in PubMed

PubMed search string		
#1		
MeSH Terms	refugees	OR
Title/abstract	refugee	OR
Title/abstract	refug*	OR
Title/abstract	“Asylum seeker”	OR
Title/abstract	“Asylum seekers”	OR
Title/abstract	“conflict survivor”	OR
Title/abstract	“conflict survivors”	OR
Title/abstract	migrant	OR
Title/abstract	migrants	OR
Title/abstract	immigrant	OR
Title/abstract	immigrants	OR
Date	26.02.2016	
Time	15:28	
Hits	42698	
#2		
Title/abstract	“diffusion of innovation”	OR
Title/abstract	“diffusion of innovations”	OR
MeSH Terms	“information dissemination”	OR
Title/abstract	dissemination	OR
Title/abstract	disseminate	OR
Title/ abstract	disseminating	OR
Title/abstract	“effectiveness in research”	OR
MeSH Terms	health plan implementation	OR
Title/abstract	implement	OR
Title/abstract	implementation	OR
Title/abstract	implementing	OR
Title/abstract	“knowledge to action”	OR
Title/abstract	“knowledge transfer”	OR
Title/abstract	“knowledge translation”	OR
Title/abstract	“research to practice”	OR
Title/abstract	“scale up”	OR
Title/abstract	“Scaling up”	OR
Title/abstract	“research utilisation”	OR
Title/abstract	“research utilization”	OR
Title/abstract	“technology transfer”	OR
Title/abstract	“translational research”	OR

PubMed search string		
MeSH Terms	practice guidelines as topic	OR
Title/abstract	"practice guideline"	OR
Title/abstract	"practice guidelines"	OR
Title/abstract	"evidence-based medicine"	OR
Date	26.02.2016	
Time	14:09	
Hits	386258	
Combined #1 AND #2		
Date	26.02.2016	
Time	15:29	
Hits	1417	

See Table 3.4 for an overview of search hits in each database. After having checked for duplicates, 3,979 abstracts were included for a first review round. In the first two weeks of March the abstracts were screened by two reviewers.

Table 3.4. Number of hits per database

Database	Number of hits	Date	Time (CET)
Sociological Abstracts	995	26.02.2016	17:13
PILOTS	64	26.02.2016	16:04
Cochrane	66	26.02.2016	16:49
PubMed	1417	26.02.2016	15:29
Embase	2116	26.02.2016	15:56
PsycINFO	861	29.02.2016	15:29

4.2 Online survey

A survey is developed and disseminated among professionals and experts at the different work locations of the partners in Greece, Hungary, Croatia, Italy, Austria and the Netherlands. The survey target group consists out of two types of participants. On the one hand it is important to reach individuals who are involved in facilitating and coordinating the provision of health care for refugees and other migrants. These survey participants can be involved, for instance, in strategy and guideline development, policy-making, legal matters, logistics, capacity planning, and planning of practical support. On the other hand it is crucial that operational professionals and frontline workers with practical experience are consulted: primary health care professionals, social and youth workers, and more specialized care givers including psychologists, psychiatrists, radiologists and testing staff, not volunteers. The personal interaction with refugees and migrants is what distinguishes this second group of professionals from the first one. It is

important that participants from both groups have recent experience with issues, challenges and problems concerning refugees and migrants in Europe. These experience are preferably related to local health care practices, but national and regional experiences are valuable as well. The survey link is accessible in March and April.

4.3 Expert interviews

In addition to the survey and the literature review, expert interviews are conducted to assemble information about the contexts, meaningful structures, process characteristics and challenges of health care for refugees and other migrants on the ground. They are also asked to provide concrete examples of effective interventions that could be used in the current refugee crisis. In consultation with the other partners, NIVEL will invite 10 to 15 international experts (a.o. UNHCR, The Red Cross, Medicins Sans Frontieres and Medicines du Monde) for an individual interview. Interviews will take place by Skype or telephone and will be semi-structured, based on a predefined topic list:

1. Which role do you have concerning health care for refugees and/or migrants?
2. What is, to your opinion, most important for a successful organization of refugee and migrant health care in the European setting?
3. What are the biggest challenges? Specifically, for transit countries and for long term settlement countries?
4. What factors, are essential for helping implementation of health care measures for refugees and other migrants in Europe?
5. Which barriers for implementation need to be addressed first for successfully implementing health care measures for refugees and other migrants in Europe?
6. Could you recommend specific health care interventions that would be feasible in the current context of the refugee crisis? (think about prevention, screening, therapy, clinical interventions etc.)

Interviews will be recorded with permission from the interviewee. Data will be integrated and analysed according to the principles put forth in “Applied Thematic Analysis” (Guest et al., 2012).

4.4 Data analysis

The included material will be studied by at least two independent reviewers. The partners will be asked to assist with interpreting documents and information in their native language. An overview (in English) will be produced with information on:

- Year the intervention or measure was applied (if available)
- Context (country, refugee or migrant population, type of service provider)
- Evidence strength for effectiveness (applying a hierarchy; e.g. EPOC or PRISMA)
- Description of intervention and measure and its application (single intervention or multi-faceted programme)
- Implementation factors (Flottorp et al., 2013)
- Recommendations for improvement i.e. resolving obstacles

5. Preliminary findings

In this preliminary report preliminary findings on the four thematic areas are presented: mental health/psychosocial care (§5.1), women, maternal and childcare (§5.2), infectious diseases (§5.3), and chronic and non-communicable diseases (§5.4).

This preliminary evaluation showed high heterogeneity between studies in terms of design. Most of them were cross-sectional and/or descriptive in nature and therefore the assessment of the quality of the provided evidence on the basis of established schemes (Gouweloos et al., 2014) was, in many cases, a challenging task. Many of the studies were qualified "weak" and sometimes "moderate". The design of the selected studies is often based on cross-section data. Also, case-reports and non-systematic reviews were found (see Table 4.1 at the end of this section).

Identification and classification of barriers and enablers were based on systematically evaluated criteria for the assessment of factors that prevent or facilitate the implementation of health care professional practice (Flottorp et al., 2013).

5.1 Mental health/psychosocial care

The preliminary findings on the implementation of screening, assessment and treatment of psychosocial problems for refugees and other migrants are based on five articles that were selected on the basis of availability, year and relevancy of the title.

Only a few recent studies deal with Syrian refugees coming to EU. However, valuable lessons can be learned from implementation of psychosocial interventions in refugee camps, for example in South Africa.

<u>Professional level</u>

Most studies identified the training of professionals in cultural sensitive aspects as a core enabler (Watters, 2010, Brugha, 2014, Melle, 2014, Mollica, 2014). The proposed H5 model (Molica, 2014) argues that professionals should know about basic human rights and develop deep listening skills for trauma treatment. Watters (2010) indicates that professionals need to be up to date on the political and legal situation of the receiving country and the country of origin of the refugees. Watters (2010) and Brugha (2014) advise that the mental health services themselves should intrinsically reflect the culture and needs of the refugees they seek to engage with.

<u>Patient level</u>

Importantly, refugees should themselves be involved in the organisation of mental and social health care to clearly identify their needs. General health promotion programs should be made available across refugee camps (Watters, 2010, Brugha, 2014).

Organisational level

Most initiatives of specific refugee services for mental health are organised bottom-up and not structurally financed. This becomes a barrier because this limits the continuity of care for migrants. Mental health care for refugees should be structurally embedded in national mental health care organisations.

Moreover, it is recommended that social care and mental health care are closely integrated as mental health problems and social problems are highly related within refugees. Furthermore, it is argued that a good habitat is essential for mental well-being. Governments should provide appropriate housing, access to employment and other aspects for good habitat (Mollica, 2014).

The focus for psychosocial therapy for refugees is different than within regular patients. Namely, therapy should not be emotional or ego focused, but rather offer more problem solving and practical tools. Basic information on family education and illnesses should be made available in appropriate languages for refugees to understand what mental health care entails. Cognitive behavioural therapy has to be adjusted to the cultural traditions of refugees (Brugha, 2014).

Specialized health care needs to be available for the minority of refugees with severe psychiatric problems. Regarding the screening and assessments, a cross-sectional study from the Netherlands (Melle, 2014) found that GPs underestimated the prevalence of common mental disorders in refugees. Therefore it is needed that GPs are trained in the recognition of common mental disorders in refugees and other migrants.

A longitudinal cohort study in South Africa demonstrated the feasibility of depression screening by using SMS services (Tomita, 2015). Most refugees had access to SMS services and the low rate of incomplete responses and relative ease of use support the feasibility. Biggest challenges were problems with phone network (network delay) and the theft of phones.

Finally, data on screening, assessment and treatment results should be collected systematically (Brugha, 2014).

5.2 Women, maternal and childcare

From the 51 articles selected on the basis of title and abstract for this thematic area six were reviewed for this preliminary study. These specific studies were used to explore the usability of the framework. Studies were conducted in a wide range of settings, from maternity care assistants practising a home-care setting in the Netherlands to infant feeding practices at refugee camps in the Balkans. The target group differs as well; Syrian refugees in Jordan, non-western women in the Netherlands, refugees in Sub-Saharan Africa, African refugees that resettled in Australia, Kosovar refugees at the Balkans and refugees at the Thai-Myanmar border. Even though this clearly challengds

the integration of the findings, general barriers and enablers were identified across settings and formulate general recommendations.

Professional interactions

At the level of individual barriers of staff and patients, difficulty with communication is seen as a primary issue. (Casey, 2015, Boerleider, 2014, Correa-Velez, 2012, Krause, 2015, Borrel, 2001). Therefore it is suggested to make use of appropriate cultural mediator services, translated information and staff that put effort in working towards building a trusting relationship.

Practical issues were identified for the use of cultural mediator services. For example, making sure that the gender and age fits with patient's expectations. Women could for example feel uncomfortable to share sensitive issues with male cultural mediators. Continuity of cultural mediators, which could help building trust and would prevent patients needing to tell their private stories to different cultural mediators. And reserving longer time for consultations when cultural mediator services are used, because that generally takes more time. Another suggestion was to appoint officers (for example social workers) that can form a bridge between service providers and patients. They could assist with the delivery of culturally sensitive information. (Correa-Velez, 2012)

Patients and providers lacked awareness about the availability of services. Therefore they need to be better informed about these services. It is essential to provide information about the health care system, healthy health care practices and to address the needs for health care. Together these could increase the uptake of care (Casey, 2015).

Patient and professional level

An important barrier in the provision of health care is the lack of knowledge and/or skills among health care professionals (Krause, 2015, Borrel, 2001, Hoogenboom, 2015, Correa-Velez, 2012, Casey, 2015). Not having the skill set to provide adequate services and limited knowledge regarding available services, protocols, guidelines, legislation, the needs of refugees and the complex social and medical histories of refugees. Furthermore, cultural sensitivity of practitioners is in need of improvement (Correa-Velez, 2012, Boerleider, 2014) . For example not engaging family in maternal care even though this is part of culture and expected by patients. Furthermore, cultural barriers of practitioners themselves regarding Family Planning services (FP). Resulting in misconceptions about the provision of appropriate care. For example not providing condoms to unmarried women. Therefore, trainings to increase knowledge, skills, and cultural competence are recommended. Especially in regard to issues such as female circumcision, trauma and traditional birthing practices.

A strategy to make care more culturally sensitive is suggested by Boerleider (2014), 'being flexible' in the sense of searching for a compromise between the cultural

practices of patients and protocols when this poses no danger, would enhance practice. And building a trusting relationship with patients and their families (Boerleider, 2014, Correa-Velez, 2012). Several barriers are experienced by patients in accessing reproductive health services. Women face cultural barriers that prevent them from making use of health services (Borrel, 2001, Krause, 2015, Casey, 2015). They tend to comply with cultural norms due to fear of stigma or social repercussions (Krausse, 2015, Casey, 2015). Their limited understanding, knowledge and awareness of available health services and health problems and need for seeking care are resulting in a low uptake of care. Educational programs to inform about health issues and available care can increase acceptability and uptake of care. The provision of translated information and appropriate cultural mediator services could further reduce these barriers.
It was recommended to educate professionals, patients and communities to reduce stigma, raise awareness and increase acceptance and the uptake and provision of services (Casey, 2015, Krause, 2015).

Organisational level

The lack of a comprehensive monitoring system (Casey, 2015, Krause, 2015, Borrel, 2001), insufficient funding (Borrel, 2001, Krause, 2015), limited supply and equipment (Casey, 2015, Hoogenboom, 2015, Krause, 2015, Borrel, 2001), poor coordination, unclear division of roles (Krausse, 2015, Borrel, 2014), lack of capacity in terms of time and resources and staff changes were mentioned as barriers. Borrel (2001) recommends to appoint a lead agency that takes responsibility for a well-functioning monitoring system, this system could increase accountability and enable identification of weak point in implementation. Reproductive health services are recommended to be integrated in general care (Casey, 2015). An enabling environment could motivate staff and influence the perceived quality of health care services by patients (Hoogenboom, 2015). Especially, safeguarding the continuity of carer was mentioned as beneficial (Correa-Velez, 2012, Hoogenboom, 2015). “Continuity of carer increases women satisfaction, trust and confidence and improves communication and enhances women's sense of control and ability to make informed decisions” (Correa-Velez, 2012).

Social, Cultural and Legal barriers and enablers

Social and cultural norms in the community can result in a low uptake of services. For example social sanctions against PLHIV, rape survivors or women that use FP methods. Therefore, communities need to be informed about health benefits of services (Krause, 2015). At the national level policies and legislation need to be in place to support RH services. Implementers are struggling with restrictive national policies or absence of policies. For example the clinical management of rape survivors or female circumcision policy is lacking (Casey, 2015, Krause, 2015). A pre-existing health infrastructure facilitates practices on the ground (Kraus, 2015) As well as the willingness to address reproductive health issues (Krause, 2015, Casey, 2015).

5.3 Infectious diseases

The present preliminary findings for the infectious disease cluster are based on 9 recently published peer-reviewed articles. Five of them involved (at least to some extent) EU countries as setting. The majority of these studies focused on Tuberculosis as health outcome of primary investigation. The primary target group was (but not restricted to) refugees from several (non-western) countries. Time-frame varied from before-arrival at the setting to long-term settlement. Only one study focused specifically on Syrian refugees. There was no restriction regarding basic demographic characteristics (age, gender) of the target groups in most of the examined studies. Among the involved parties were (inter)national expert networks, national and international (health) organizations (WHO, UN, Centre for Disease Prevention), Ministries, local authorities and health care providers.

Guideline factors may act as barriers when there is lack of established international guidelines on screening among migrants, taking into account also the differences between countries receiving immigrants, the number of arriving migrants and their status (e.g refugees, economic migrants). (Kärki et al., 2014). Lack of a broadly accepted treatment protocol and guidelines for disaggregating data collection comprise additional barriers (Riccardo et al., 2012; Cookson et al., 2015). However, implementation of health interventions is strengthened by the availability and accessibility of evidence-based health care practice guidelines (Falla et al., 2013; Nardel et al., 2016) that take into account the time frame between medical screening and patient mobility (Wingate et al., 2015).

A number of patient factors were identified as major barriers, such as language/communication limitations, psychological and socio-cultural factors (Riccardo et al., 2012), lack of adhere to medication (Cookson et al., 2015) and high comorbidity levels among patient groups, which requires additional, costly interventions (Cookson et al., 2015) and migration status (Napoli et al., 2015). Nevertheless, intervention implementation is facilitated and associated costs are lower when screening is targeted only to patients coming from intermediate to high endemic areas (El-Hamad et al., 2014; Wingate et al., 2015); in this case, patient characteristics are acting as enablers.

Social and legal factors as well as incentives and resources were identified as crucial barriers and enablers. Legal restrictions and (health care) user fees (Riccardo et al., 2012), especially for undocumented patient groups (Falla et al., 2013), as well as difficulties in securing an intervention funding source that is stable over time (Cookson et al., 2015) seem to be important obstacles. Measures for the prevention of airborne infections are more difficult to be implemented when are expensive and associated with high maintenance costs or not applicable all year (e.g. because of the local climate) (Nardel et al., 2016). On the contrary, information availability and accessibility appear to be enablers of primary importance. For instance, the initiation of interventions is facilitated by free patient access to primary care (El-Hamad et al., 2014), increased information availability among mobile communities (Riccardo et al., 2012). In addition,

disaggregating data collection to monitor and evaluate health service performance among mobile groups and building trust in public health services (Riccardo et al., 2012). Measures for the prevention of airborne infections are recommended to be widely available and cost-effective in order to facilitate implementation (Nardel, 2016).

Regarding the primary and secondary care setting, will/motivation and skills of health care staff (Storberg et al., 2015) as well as collaboration between health care management and staff on the implementation of the guidelines (Storberg et al., 2015) are positive aspects towards implementation. On the contrary, the fact that referral practice is highly divergent between EU countries (Falla et al., 2013) and cross-border communication between different national health programs is not sufficiently established (Cookson et al., 2015) act as hindering factors. Moreover, health care infrastructure in some EU countries can reduce the capacity for organizational improvements (Storberg et al., 2015).

Legal and political factors such as host country legislation and political decisions that do not favour health care reforms (Napoli et al., 2015; Storberg et al., 2015) can also be important barriers. Furthermore, living in a conflict zone/being internally displaced may result in delayed treatment (Cookson et al., 2015), while social stigma and discrimination towards the target groups constitutes a profound barrier (Kärki et al., 2014 ; Cookson et al., 2015)

5.4 Chronic and noncommunicable diseases

Preliminary findings for the chronic noncommunicable disease cluster are based on 5 recently published articles (only one study performed in the EU). The majority of the examined publications focused on cardiovascular problems and diabetes as health outcomes of primary investigation. In most of the studies, the primary target group was adult refugees with a long-term settlement. Among the involved parties were international organizations (e.g United Nations), National expert societies and health care providers.

Patient factors and incentives-resources were identified as the most frequent barriers and enablers respectively. More specifically, patient factors that hindered the implementation of health programs/interventions were: cultural beliefs (Modesti et al., 2014), forced lifestyle changes (Modesti et al., 2014), unfamiliarity of patients with health care system (Otoukesh et al., 2015), fear of prosecution (in case of undocumented patients) (Otoukesh et al., 2015), passive attitude towards treatment (van de Vijver et al., 2015) and language barriers (Wagner et al., 2015). Nevertheless, similarities/overlap between different target groups (e.g in terms of lifestyle, risk factors, socio-economic status) was considered a facilitating factor towards the application of previously tested interventions on different settings and populations (van de Vijver et al., 2015).

Incentives and resources such as availability and easy access to treatment (Otoukesh et al., 2015; van de Vijver et al., 2015), relevant education for health care providers and low intervention costs (Shahin et al., 2015) seem to play a major role in the implementation of health interventions. However, patients' financial problems as well as lack of registry data and clinical databases to study the clinical profile of the target groups (Modesti et al., 2014) pose as considerable obstacles.

Health care practice guidelines acted as barriers when suggested increased mobility/transportation of patients to different locations (Wagner et al., 2015) and as enablers when being adjusted to patients' cultural background to facilitate acceptance and compliance (Modesti et al., 2014). Involvement and supportive behaviour of health care staff (Shahin et al., 2015) and international partnerships between providers within the framework of cross-cultural multidisciplinary teams (Otoukesh et al., 2015; Wagner et al., 2015).

Moreover, an unfavourable social context that enables social exclusion and isolation of patients, may have an adverse impact on the implementation of prevention and treatment strategies (Modesti et al., 2014). Inverse outcomes are expected when the (local) community is supportive and actively involved (van de Vijver et al., 2015; Wagner et al., 2015).

Table 4.1. Methodological quality of studies

author	**year**	**health domain ***	**study design (RCT,CBA,ITS,UBA. mixed)**	**quality**
Boerleider	2014	A	qualitative. 15 interviews	weak
Borrel	2001	A	analysis of practice and policy. No clear method description.	weak
Casey	2015	A	cross-sectional mixed methods study (FDGs, questionnaires and HFA's)	weak
Correa- velez	2012	A	mixed methods. literature review, consultations with key stakeholders, chart audit of hospital use, surveys among patients and hospital staff	weak
Krause	2015	A	3 methods: Key informant interviews(KIIs), health facility assessment(HFAs), focus group discussions (FDGs)	weak
Hoogenboom	2015	A	HFAs (interviews, analysis of maternal records and observations	weak
Watters	2010	B	summary of study	Moderate
Bhrugha	2014	B	guidance document	Weak
Melle	2014	B	cross sectional study	Moderate
Tomita	2015	B	cohort	moderate
Mollica	2014	B	report	weak

author	year	health domain *	study design (RCT,CBA,ITS,UBA. mixed)	quality
Riccardo	2012	C	cross sectional study	weak
Falla	2013	C	cross sectional study	Weak
Kärki	2014	C	cross sectional study	Weak
Hamad	2014	C	longitudinal	Moderate
Cookson	2015	C	case study	Weak
Napoli	2015	C	cross sectional study	Weak
Storberg	2015	C	case study	Weak
Wingate	2015	C	cost-benefit analysis	Weak
Nardel	2016	C	non-systematic review	Weak
Modesti	2015	D	narrative review	Weak
Otoukesk	2015	D	retropsective cohort	Moderate
Shahin	2015	D	narrative review	Weak
Van de Vijver et al	2015	D	protocol	Weak
Wagner	2015	D	review	Weak

* (A) Maternal and child (B) psychosocial (C) Infectious diseases (D) chronic and non-communicable

6. Practical recommendations

General recommendations

The strategic objectives of UNHCR, the flow chart, the IOM health record and handbook, and the evidence-based guidelines serve as a logical and useful framework to optimize health care for refugees and other migrants in European settings. However, the implementation science models point at recurring barriers, in every type of health domain, that must be given attention during the implementation of health care interventions and measures (barriers are encountered in each of the dimensions distinghuished by Flottop et al., 2013).

After having accessed Europe, refugees and migrants are moving towards less vulnerable countries with more favourable health care conditions and capacity, both on the short and on the longer term.[1] Most of the relevant system features and country conditions that influence the quality of health care for refugees and other migrants are exogenous factors; undeniably relevant, but difficult to influence. It is recommended to invest in optimization efforts in local implementation of promising programmes or single interventions and measures and not in large-scale system reform.

Screening actions should be accompanied by an appropriate professional follow-up to those who seem to have severe health problems.

[1] More information can be obtained from the first author (m.duckers@nivel.nl).

Policy-makers

Policy-makers should plan and facilitate local activities in line with a stepped care model, in which primary care professionals form a front-office between refugees and more specialized health care professionals. It is important to promote the safe use of a medical booklet in a paper or a virtual way to ensure that health care professionals in different locations can learn from what is already known. Moreover, they should facilitate the training and education of health care professionals in relation to mental, women and reproductive health issues, infectious diseases, chronic and noncommuncable diseases.

Health care professionals

Health care professionals ought to be aware of cultural norms and stigma in relation to health problems in all the categories addressed in the EUR-HUMAN project. The professional-patient interaction plays a crucial role in the delivery of high-quality health care. Besides taking care of the interests of refugees and other migrants, professionals should take good care of their own well-being, including protective measures against risk of infection. Knowledge and skills must be kept up to date.

Refugees and other migrants

Refugees have a responsibility in taking good care of the health and well-being of themselves, their children and vulnerable relatives and friends, during their journey and arrival in the country of destination. It is in their interest to keep a recent, completed health record accessible, physically or virtually.

Other relevant stakeholders

Researchers should cooperate with health care professionals in the evaluation of interventions and measures and broadly share their findings with other health care professionals, policy-makers and the academic community.

7. Summary and conclusion

This report presented the preliminary findings of WP3. In the first section the background of the EUR-HUMAN project was briefly addressed, followed by a description of the objectives of WP3. Next, a heuristic framework was sketched, based on a combination of three categories of sources, forming a lens to analyse the material collected using the methods described in the fourth section: the scoping review, the online survey and the expert interviews. The studies discussed in section 5 illustrate the suitability of the framework in assessing the contents of the collected material in WP3. In this section the results per health domain were structured according to the dimensions (different types of determinants for implementing changes) distinguished by Flottorp et al. (2013) – information of this sort seems indispensable for any attempt to enhance the health care provision for refugees and other migrants in local settings across Europe. In the previous section some recommendations were listed for different stakeholders. In the final report the list is going to be expanded.

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