MEETING ON CHILD HEALTH REDESIGN IN THE WHO EUROPEAN REGION

Copenhagen, Denmark
31 October-2 November 2017
ABSTRACT

Child mortality halved to less than 6 million deaths during the Millennium Development Goals period. WHO guidelines, such as the Integrated Management of Childhood Illness (IMCI), are assumed to have contributed to this. The transition to the Sustainable Development Goals framework provides an opportunity to reconsider and revise the global child health response to redesign programming on child health. As part of this process, WHO headquarters is jointly conducting consultations with its regional offices, key stakeholders and end-users. The consultation for the WHO European Region took place at a meeting in Copenhagen, Denmark on 31 October–2 November 2017. The main conclusions and recommendations emerging from the meeting were that the revisited child health approach will need to build on the results and lessons learnt from regional and global IMCI reviews. This will mean ending non-evidence-based practices, counteracting inappropriate medicalization and ending unnecessary treatment and hospitalization. Other recommendations focus on standards and competencies for primary care providers. The follow-up of recommendations and proposed work plan should be linked to the declaration of 40 years of Alma-Ata in 2018.

Keywords

ADOLESCENT HEALTH
ADOLESCENT HEALTH SERVICES
CHILD HEALTH
CHILD HEALTH SERVICES
SCHOOL HEALTH SERVICES
DELIVERY OF HEALTH CARE, INTEGRATED
MANAGEMENT OF CHILHOOD ILLNESS
PROGRAM EVALUATION
EUROPE
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Acknowledgements

For the purpose of the consultation organized on behalf of the WHO Regional Office for Europe, the Child and Adolescent Health Programme brought together experts representing different technical areas, including in-house officials from other departments and country offices, and external professionals. The Programme team would like to thank all participants, those who represented organizations outside United Nations agencies, United Nations agencies (United Nations Children’s Fund and United Nations Population Fund), WHO headquarters, WHO country offices, all WHO Regional Office for Europe departments and colleagues in the Division of Noncommunicable Diseases and Promoting Health through the Life-course for their informative presentations and key contributions to technical discussions, and for identifying priorities and recommendations for the WHO European Region.

The report was written by Ana Isabel F. Guerreiro and Susanne Carai, consultants, WHO Regional Office for Europe.
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BCG</td>
<td>Bacillus Calmette-Guérin (vaccine)</td>
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<tr>
<td>ETAT</td>
<td>Emergency Triage Assessment and Treatment (course)</td>
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<td>EuTEACH</td>
<td>European Training in Effective Adolescent Care and Health (model)</td>
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<td>HBSC</td>
<td>Health Behaviours in School-aged Children (study)</td>
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<td>HEADSSS</td>
<td>home, education/employment, eating, activity, drugs, sexuality, safety, suicide/depression (assessment)</td>
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<tr>
<td>ICATT</td>
<td>IMCI Computerized Adaptation and Training Tool</td>
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<tr>
<td>ICD–10</td>
<td>International Classification of Diseases 10</td>
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<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
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<td>IM(N)CI</td>
<td>Integrated Management of Childhood (Newborn) Illness</td>
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<td>MOCHA</td>
<td>Models of Child Health Appraised (project)</td>
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<td>mhGAP</td>
<td>WHO Mental Health Gap Action Programme</td>
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<td>NCDs</td>
<td>noncommunicable diseases</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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<tr>
<td>SWOT</td>
<td>strengths, opportunities, weaknesses and threats (analysis)</td>
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<tr>
<td>TB</td>
<td>tuberculosis</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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Day 1

Opening session

Opening and welcome

Martin Weber opened the meeting and welcomed the participants. He introduced the purpose of the meeting, which was to feed into the global review and development process for redesigning child health. In 1995, WHO and the United Nations Children’s Fund (UNICEF) launched the Integrated Management of Childhood Illness (IMCI) as a global strategy to end preventable child mortality and promote child health and development. IMCI was introduced in the WHO European Region in the late 1990s in 15 Member States and the territory of Kosovo.1 In 2016, WHO, UNICEF, the United States Agency for International Development (USAID) and the Bill & Melinda Gates Foundation carried out a global review of Integrated Management of Childhood (Newborn) Illness (IM(N)CI), with a focus on Africa and Asia. To complement the global review, the WHO Regional Office for Europe conducted an in-depth review of the status of implementation in the 16 European countries and territories that have introduced or considered introducing IMCI.

Objectives of the meeting

Aigul Kuttumuratova led participants through the objectives of the meeting and the agenda, and all participants were introduced. The overall objectives were to:

1. get regional feedback on the IMCI child health strategic review and the European IMCI review with a focus on the recommendation on redesign of child health guidelines and guidance materials;
2. consider different child health areas towards the redesign of child health guidelines and guidance materials; and
3. provide recommendations on the way forward for WHO guidelines for children and adolescents in Europe.

The first day aimed to present and discuss the findings of the global and European reviews. The second day aimed to address the neglected areas of adolescent health, mental health, child abuse and neglect, injury prevention and noncommunicable diseases (NCDs), among others. Day three looked at child and adolescent health care needs in humanitarian emergencies, draw recommendations and present the way forward. The meeting agenda can be found in Annex 1 and the list of participants in Annex 2.

Elizabeth Molyneux was appointed unanimously as chairperson to the meeting.

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1 For the purposes of this publication, all references, including in the bibliography, to “Kosovo” should be understood/read as “Kosovo (in accordance with Security Council resolution 1244 (1999))”.  

Session 1. The global and regional IM(N)CI reviews

Findings of the WHO headquarters IM(N)CI strategic review

Wilson Were presented on the global strategic review of IMCI carried out in 2016 by WHO headquarters and UNICEF in several countries, including a number from the European Region. The rationale for carrying out the review included the changed context from when IMCI was introduced in 1996 (child mortality decreased from 91 to 43 deaths per 1000 live births between 1990 and 2015, with most deaths now occurring during the newborn period), changing epidemiology, including the double burden of malnutrition (undernutrition and obesity), and the expansion of scientific evidence and available technology, including new vaccines.

Lessons learnt from 20 years of IMCI implementation were collated to depict the big picture and the way forward in the Sustainable Development Goal area. The main conclusions from the global IMCI review included:

- health care providers in all countries around the globe greatly appreciated IMCI for its simple and comprehensive clinical algorithm and holistic and child-centred approach;
- IMCI was associated with a 15% reduction in child mortality when activities were implemented in health facilities and communities; and
- IMCI had a positive effect on health-worker performance and quality of care.

IMCI was best implemented in countries where the health system context was favourable and suitable for guidelines, a systematic approach to planning and implementation was used, and political commitment allowed for institutionalization. Problems concerning IMCI implementation included: the fragmentation of global child health strategies that undermined programming and limited impact; adequate funding not being made available; evidence not being systemically generated; strategies not being tailored to the country and context; coverage at scale rarely being achieved; and training focusing more on health-worker performance and less on health systems and community practices. In addition, there often was insufficient attention paid to monitoring and evaluation, resulting in a lack of accountability. A more programmatic approach, as opposed to the strategic one adopted, may be required for the future.

The main messages and reflection for recommendations coming out of the global review were that:

- it is crucial to bring people together and consolidate child health strategies globally;
- it is essential to mobilize resources nationally and internationally to ensure investment towards child health;
- there must be some investment in looking at evidence that has been generated as inputs to the new guidelines that will be redesigned; and

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- it is important to design the next phase of child health guide for implementation in a way that ensures accountability at national level, including monitoring progress at all levels.

WHO is attempting to respond to these challenges and has promoted ongoing regional consultations. Following this, it will set up a global advisory group and establish a leadership mechanism.

**Findings of the WHO Regional Office for Europe IMCI review**

Aigul Kuttumuratova summarized the findings of the regional IMCI review conducted in Europe to complement the global IM(N)CI review (a draft report was distributed prior to the meeting). The WHO Regional Office conducted an in-depth review of the status of IMCI implementation in the European Region in 2016/2017, where IMCI was introduced in the late 1990s to 15 of its Member States and the territory of Kosovo. While huge disparities in childhood mortality existed (and still persist) in the Region, high mortality was not the main concern in many countries and territories that considered implementing IMCI. Low quality of care, absence of evidence-based guidelines, polypharmacy and overhospitalization warranted the promotion of IMCI. Health system inefficiencies were common. Twelve countries had been transitioning from the Soviet Union to independence, with considerable health system changes.

The objectives of the IMCI review were to:
- review and summarize the status of IMCI implementation and its relevance and effectiveness in providing quality health care to children in Europe, based on reviews in 15 European IMCI countries and the territory of Kosovo;
- gain an in-depth understanding of factors leading to adoption of IMCI and its sustainability, or why IMCI was not scaled up and sustained; and
- collate lessons learnt and inform future steps for providing primary and referral care to children in Europe.

A framework to guide the review and semi-structured questionnaires for key informant interviews and focus group discussions at national, district and facility levels were developed. Prior to the data collection in countries and territories, desk reviews of relevant materials, including information collected via a pre-visit questionnaire, were completed. Investigators carried out interviews and focus group discussions during 2–4-day visits to countries and regions (on three occasions by Skype). Findings were discussed and summary conclusions drawn during an investigators’ meeting in Chisinau, the Republic of Moldova.

IMCI was introduced in 15 countries in the European Region and the territory of Kosovo through orientation meetings. Of those, 14 decided to go ahead with piloting of IMCI in 2–3 districts. Reasons against piloting IMCI included IMCI not being relevant and too basic for the respective contexts and competing priorities of ministries of health. Only eight implemented IMCI at national scale. The three IMCI components were introduced unevenly, with a strong focus on training for primary health care workers. The health system and community components lagged behind. Subsequently, 11 also introduced activities to improve quality of care at hospital level.
IMCI drugs were included in the national essential drug lists in almost all participating countries and in the list used in Kosovo, but consistent availability of IMCI drugs free of charge for children was reported from four.

IMCI implementation stalled in most countries and territories when external support stopped, and ceased completely in six that had gone ahead with IMCI implementation. Integration into pre-service training and/or continuous professional education was achieved only in a limited number of countries and territories, and to different extents and with varying quality.

The following common themes arose from the studies.

- IMCI, where implemented, was perceived as having contributed to the reduction of under-5 mortality, particularly in relation to mortality from pneumonia and diarrhoea.
- Findings indicated that IMCI was perceived as having improved quality of care for children by promoting the use of standard management guidelines based on evidence, improving the rational use of antibiotics, and decreasing polypharmacy and unnecessary hospitalization.
- In countries and territories with rural areas in which often only nurses are available, IMCI was appreciated for its systematic identification of danger signs and children in need of referral.
- The sustainability of IMCI was found to be limited in many settings. IMCI implementation was often donor-driven and stalled or was discontinued when external funding ceased.
- Systematic integration into pre-service training and postgraduate education took place only in a limited number of countries and territories. Incompatibilities between IMCI and existing policy requirements and regulations (such as inconsistency of International Classification of Diseases 10 (ICD–10) versus IMCI classification, policy requirements for admitting children with diarrhoea to infectious diseases hospitals and investigating stool samples in countries of the former Soviet Union) were not consistently addressed to enable IMCI implementation.
- Extensive paperwork requirements and the assumption that the entire algorithm had to be repeated for every child were reported as obstacles to IMCI implementation. While the IMCI algorithm was not designed to be relevant for all types of health workers in all settings, its positioning was sometimes perceived as dogmatic, and the algorithm was seen as being too basic, particularly for trained physicians.
- The focus on health worker training was based on the assumption that a “health worker trained” leads to the implementation of IMCI.
- The community and health system components were not fully defined or understood, leading to unbalanced implementation of the three IMCI components.
- IMCI was viewed as being more relevant for remote areas where only nurses or fieldshers were providing care. This might mean an acceptance of the provision of lower quality care as being adequate for children in remote areas who could not access other services. Implementation of IMCI may therefore have contributed to persistence of inequities within countries and territories, particularly where it was not rolled out throughout the whole area.
Key informants in many settings reported that parents preferred and expected more medicalized care: for instance, they preferred intravenous treatment over oral rehydration salts, and several drugs over one. Parents often skipped primary care and took their child directly to a specialist at secondary- or tertiary-care level, seeking more sophisticated diagnostic tests and treatments. Primary-care level was often perceived as not offering services for sick children and was only used for preventive measures, such as immunization and monitoring visits.

The fact that IMCI training had not been sustained in many countries and territories indicated that political support for IMCI had been lacking. Findings also suggested that academia, particularly senior university professors and professional associations, had been opposing IMCI as being too simple, which had an impact on its effective integration into pre-service training.

Treatment choices were not always led by evidence-based decisions and even guidelines for management of sick children were not always based on the best available evidence. Additionally, health-worker motivation and performance seemed to be strongly linked to incentives or adverse incentives, such as aggressive marketing by the pharmaceutical industry of more costly or profitable drugs and formulations.

Overall, increasing privatization of health services or for-profit medicine and the need to consider economic aspects in the provision of care were observed in almost all settings. This influenced not only health workers’ performance and ability to adhere to guidelines, but also the development of guidelines themselves.

Low salaries and the absence of opportunities for continuous education and career development had an influence on health-worker performance and motivation. In some of the countries and territories, particularly in rural and more remote areas, poor working conditions in relation to infrastructure, such as lack of heating during winter, were also reported and were certainly not conducive to the provision of quality care.

Performance-payment schemes and indicators, as well as punishing policies and the lack of supportive supervision, were likely to affect practice. Health systems were often constructed in a way that incentivized hospitalization instead of outpatient care, overtreatment instead of appropriate use of drugs, and use of expensive drugs instead of indicated drugs.

Payment schemes promoted hospitalization in some countries and territories: for example, the salaries of some doctors were paid according to the number of patients hospitalized. Health insurance schemes that covered drugs and diagnostic services for patients admitted to hospital, but not for outpatients, constituted incentives for hospitalization from the patient (demand) side. Many health systems “no longer desire[d] a healthy child”, as one key informant put it, as they required the child to be sick to create revenues, both in relation to carrying out diagnostic test and prescribing medications. IMCI drugs were included in the drug lists in almost all reviewed countries and territories and were nominally provided free to children, but parents were often required to pay out of pocket for different drugs to create revenues or other benefits through pharmaceutical companies.

Systems dealing with children in parallel to the family doctor or paediatrician under ministries of health (such as neuropaediatricians in some of the countries of the former
Soviet Union or the defence ministry running its own health system) also influenced the quality of care being provided to children overall.

The IMCI strategy has gone a long way in promoting evidence-based medicine and the rational use of drugs in European countries and territories. In introducing IMCI, discussions on health systems requirements and needs for reform were found to be particularly neglected in most countries and territories, which needs to be rectified. Health workers need to be trained in evidence-based practice before deployment and be able to access continuous medical education.

The renewed IMCI approach must build on its sound support for health workers in making evidence-based decisions and confronting parents’ expectations.

Poor planning and insufficient government resources for follow-up visits after IMCI training eventually led to loss of acquired knowledge and skills. Lack of supportive supervision reflects weak quality improvement systems overall in the countries and territories. Innovative tools and mechanisms to support implementation of standard treatment guidelines, such as supportive supervision and collaborative approaches that employ modern technology, are worthy of promotion.

Discussion

Participants discussed the need for a clearer definition of the community components and the need to give more attention to monitoring, impact evaluation and research (both effectiveness and cost–effectiveness) as key areas.

Framework for child health redesign in the context of the SDGs

Jon Simon presented the proposed framework for redesign in the context of the SDGs and in line with the global strategy on women’s, children’s and adolescents’ health 2016–2030. WHO is embarking on a child health redesign taking into account the new global architecture (the SDG framework and the global strategy, shifting epidemiology and a greater emphasis on health determinants), which requires stronger community engagement and interventions beyond the health sector. Redesigning child health will entail a life-course approach and focus on children as defined by the Convention on the Rights of the Child (from birth to 18 years). The vision of the global strategy is a world in which by 2030, every woman, child and adolescent realizes the right to health and well-being, has social and economic opportunities, and is fully able to participate in shaping sustainable and prosperous societies. Implementing the global strategy with increased and sustained financing over the next 15 years would yield tremendous returns.

The vision for the reconceptualization of child health and well-being in the SDG era is therefore universal health care for all children from 0–18. The agenda to be adopted in the near future will need to deal with prevention, promotion and treatment in a diversity of settings. The surviving agenda must include IMCI and other interventions that have been implemented in relation to under-5 mortality, but it must go beyond that first age group. For the 4–8 group, for example, it may relate to injury prevention; for adolescents, the surviving agenda may be related to the prevention of self-harm, HIV and so forth. Children’s development must be taken into account in the agenda, so early childhood development, and preschool, school-based and social interventions will be very important.
The ultimate goal for the health system is to raise healthy, well educated children who are socialy prepared for adulthood and enjoy a state of health and well-being.

The broad question areas are as follows.

- What are the priorities, and where should be the focus, for the surviving agenda (age, key interventions and place)?
- What are the priorities, and where should be the focus, for the thriving agenda (age, key interventions and place)?
- How do we optimize content and improve flexibility and adaptability to the local context, including options for different settings, health system development and type of target-users?

Discussion
Participants discussed the proposed goal, particularly around language issues. Participants suggested more inclusive, holistic and rights-based language that would acknowledge children with disabilities, formal and non-formal education, children’s participation and the overall framework provided by the Convention on the Rights of the Child.

Adolescent and youth-friendly health services in Europe – findings of a review

Susanne Carai presented the results of a review commissioned by UNICEF that aimed to summarize the experiences of five countries in central and eastern Europe and the Commonwealth of Independent States (Belarus, Kazakhstan, the Republic of Moldova, Tajikistan and Ukraine) in relation to their achievements with implementing youth-friendly health services with UNICEF support. The review was conducted against the eight WHO global standards for quality health care services for adolescents, which allow measurement of the gap between the quality required and the actual quality of services provided. The study revealed common trends across all youth-friendly health services: limited reach to boys and the most-at-risk adolescents, lack of a full range of services available, inconsistencies in national legislation regarding age of sexual consent versus access to services, limited meaningful participation of adolescents in decision-making and service provision, and limited economic sustainability. Positive trends identified were high satisfaction with services and youth-friendly attitudes of staff, availability of services, and respect for privacy and confidentiality.

Susanne Carai offered some policy suggestions for scaling up health services’ provision for adolescents at national level by, for example: improving health information in schools; ensuring that laws and regulations allow for service provision and access to services; improving the quality of services offered at youth-friendly health services; improving overall coverage and, specifically, for adolescent boys, most-at-risk adolescents and vulnerable adolescents; and ensuring meaningful participation. She concluded by indicating the strategic approach needed to scale up health services’ provision for adolescents, which includes addressing adolescent competencies in pre-service and continuous professional education, providing services that comply with international standards, using evidence-based guidelines that meet the needs of the region, creating innovative platforms for reaching the most vulnerable adolescents, and adopting a rights-based approach to adolescent participation.
An overview of school health services in Europe

Valentina Baltag presented an overview of school health services in Europe.

WHO published the *Global accelerated action for the health of adolescents (AA-HA!)* in May 2017 to guide country implementation. School health is central to the guidance and is part not only of the package of interventions, but also of programmatic approaches.

School health services are part of a broader school health framework promoted by WHO. They comprise one of the most common forms of child and adolescent health services in both low- and high-income countries. There are several organizational models of school health services in the European Region and globally, including school-based health services, community-based services, and a combination of both.

School health services started as a form of child health inspection that screened children for various conditions but evolved to a more public health approach. In more recent reforms, children have been given the opportunity to contact the school nurse or other practitioners when needed, in addition to scheduled medical examinations. The main services provided are health promotion and disease prevention, and the most common activities include vaccination, group health promotion and individual counselling.

One of the most critical questions in adolescent health is how adolescents are able to contact health providers. The European Commission-funded project Models of Child Health Appraised (MOCHA) has gathered evidence showing that most adolescents in the Region have an opportunity to see their health provider several times a year, or as often as needed.

Screening (height and weight, hearing, vision, nutrition, etc.) is a very common form of service provided by school health services and remains an important part of national strategies. At present, however, evidence supporting the need for such substantial screening is lacking, and there is a need to analyse its impact.

Gaps in service provision include mental health services, services for preventing injuries and violence, support for children with chronic illness, health education and counselling using motivational interviewing techniques, and making contraceptives available through school health services. There are also health system-related challenges, such as under-resourced services, lack of training and supportive supervision for nurses, and shortage of personnel. School health services are very common in the European Region, so it is important to analyse the impact of the services provided towards improvement. Globally, services are usually provided within school premises with dedicated personnel. Areas that require improvement include the need to:

- align school health services with health priorities
- better leverage the opportunity of contact between the health care provider and students
- improve the collection, analysis and use of data in school health services
- improve information-sharing between school health services and primary care team(s)
- reduce variability through the implementation of service standards
- resolve systemic issues.
The main areas identified as in need of guidance include:

- normative ratios in various epidemiological contexts
- normative guidance on age-appropriate screening tests
- cost-benefit analysis of school-based screening programmes
- cost–effectiveness of various models of school health service organization
- effectiveness of individual dialogue/motivational interviewing
- effectiveness of interventions to reduce multiple health-risk behaviours.

**Discussion**

Participants discussed the fact that evidence shows big variations between boys and girls on attending school health services, with girls attending much more than boys. This is despite, for example, mental health issues in general, and suicide in particular, affecting boys much more. School health services should therefore tailor their services to the needs of the population. Other issues raised included the fact that support for adolescents with chronic diseases to transition to adulthood is missing, and how advantage can be taken of adolescents’ informal access to the Internet.

**Mortality and morbidity burden in the European Region**

Sophia Backhaus presented on the mortality and morbidity burden in the European Region, with mortality rates accessed from the 2017 United Nations Inter-agency Group for Child Mortality Estimation report.

Child and adolescent mortality has decreased considerably in the European Region in past decades, but newborn mortality rates are lagging. The probability of dying as a child decreases with age. High discrepancies between countries are observable. Specifically, countries from the Commonwealth of Independent States show higher rates of neonatal, under-5 and adolescent mortality compared to other groups of countries in the Region. Rates should be treated with caution, since high discrepancies are observable between estimated and self-reported data.

The most common causes of death for children under 5 in the European Region occur predominantly in the neonatal stage (more than 50%) through, for example, prematurity or congenital anomalies. The main cause of death for those aged 5–14 years is road injuries. Tumours become more important with older age (10–14 years). Risk factors for NCD mortality are prominent in adolescence, as indicated by Health Behaviour in School-aged Children (HBSC) data. Useful sources of information for practitioners include reports from the HBSC surveys, the Health Stats application and the Euro Gateway (gateway.euro.who.int), a website allowing access to public health overviews, datasets and country profiles.

**Discussion**

Discussion centred on the extent to which IMCI could contribute to preventing prematurity and deal with children who survive but will have long-term health care problems, and the need for data quality.
**Group work 1**

The objective of the group work was to discuss the findings of the reviews and the limitations of the approaches in the European Region. Specifically, the groups considered the following.

- How well did the IMCI and adolescent-friendly health services strategy and guidelines serve the European Region?
- How can they be improved in relation to the issues raised?

**Group 1. Preventive, promotive counselling practices**

In relation to the question “How well did the IMCI and adolescent-friendly health services strategy and guidelines serve the European Region?”, Group 1 concluded that only a quarter of Member States had implemented IMCI, so it did not serve the whole Region. The group discussed the many obstacles to IMCI implementation, including political instability, insufficient national capacity and resistance from academia. The group felt that the primary health care approach should be supported by governments and discussed some success stories in Kazakhstan (with allocation of a budget by the government), the Republic of Moldova and Uzbekistan. The conclusion was that IMCI can be implemented successfully with support from governments and that in some settings, activities such as nutrition, vaccination and education were implemented through, but not attributed to, IMCI.

On the question of how child health guidelines can be improved in relation to the issue of pressure from parents for treatment that was raised by the regional IMCI review, Group 1 agreed that the norms should be changed. Overall, the group felt there is a need to improve carers’ health literacy.

In relation to counselling, the group felt the focus on communication skills should start in medical school (looking at, for example, how to counsel and playing the role of patient); there should be a change in how technical norms are communicated (addressing technology) and there is an overall need to invest more time in counselling to enable practitioners to listen to parents and patients.

The group felt that while every health professional should be able to deliver counselling and preventative and health promotion messages and activities, in general, nurses may be best suited to this activity. Teaching all health professionals should be seen as an opportunity to promote good practice; the doctor should be seen as a role model and should therefore be the first one being taught.

Finally, the group remarked that overall there is a need to be more strategic in the future to make IMCI-related work more appealing and to have good-quality data.

**Group 2. Curative practices**

Group 2 concluded that the main problem the IMCI and youth-friendly health services strategy and guidelines face in the European Region was not mortality, and that many problems in the Region were not reflected in the IMCI. Only 16 countries and territories implemented IMCI, so IMCI cannot have served the Region well. Evidence-based management of sick children was considered valid: while epidemiology is changing, children will continue to have fevers, pneumonia and diarrhoea, so evidence-based guidelines are required. It is important, however, to find practical ways of using them.
In discussing a question raised by the regional IMCI review on how child health guidelines can be improved in relation to persistent overuse of antibiotics, Group 2 agreed that the question is not whether the principles are valid, but rather how to ensure evidence-based medicine is implemented. The Region may therefore need a strategic approach rather than having a sole focus on clinical guidelines. Countries will need to set goals on what they want to do in the child and adolescent health agenda and WHO will need to support implementation of strategies around evidence-based medicine, including how to address health system-related challenges, and include evidence-based medicine in pre-service training. WHO will need to address and consider what must be changed to meet new requirements. The group also felt that local champions may help to ensure that practices change.

On the issue of incentives or adverse incentives for provision of evidence-based care, Group 2 agreed that it is important to overcome so-called perverse incentives, but had no concrete suggestions on how this can be done. The group also discussed the fact that adolescent health is not reflected in medical curricula; as a first point, therefore, competencies should be introduced to pre-service education. The group also considered the important issue of transition from adolescent to adult services and agreed that WHO has a role to play in setting the agenda for adolescent health.

**Group 3. Health systems approaches**

Group 3 discussed some of the shortcomings identified in how the IMCI and youth-friendly health services strategy and guidelines serve the European Region, including IMCI guidelines not fitting the systems in place and not responding to the extent necessary to countries’ reform processes. Additionally, the group identified and discussed the following priority issues for the Region:

1. fragmented child care;
2. lack of finance for IMCI implementation;
3. lack of effective monitoring systems in place;
4. economic crisis interference, which should prompt stakeholders to set priorities;
5. IMCI being launched without (initially) specific suggestions on how it should be updated;
6. the need to provide clear guidance on how to improve collaboration between sectors;
7. understanding the extent to which procedures and guidelines are actually applied;
8. including recommendations on adolescent-friendly services and care in all health care settings in IMCI; and
9. maximizing the role of school health, where those services exist.

Overall, the group felt that proposals should be prioritized and countries should feel accountable. In relation to future work, the group concluded that IMCI should provide more specific and standardized tools, as follows:

1. reflect on the gap between 5-year-old children and adolescents and adopt a developmental frame that encompasses all ages;
2. reflect on how to **tailor** the content of IMCI to different contexts, based on a needs assessment;
3. focus IMCI more on **governance**, including the importance of working with all stakeholders (including community engagement);
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4. promote a collaborative learning approach to enable learning from the experiences of various countries;
5. determine at which level good practice should be taught, focusing on pre-service (postgraduate students may have an important role to play in teaching);
6. ensure countries’ accountability, including collecting data and monitoring; and
7. define the role of e-health (including adolescents’ access to the Internet and social media).

Session 2. Considerations for the way forward – contexts of care provision for children and adolescents

The objective of the session was to identify the competencies required for context-specific care provision for children and adolescents.

Introduction

The review of IMCI implementation in Europe provides evidence of the need for a stronger health systems-based approach to enhance the effectiveness of the strategy and improve outcomes for children’s survival and thriving. It is therefore essential to look at components of context-specific care that have been missing, neglected or ineffective within the framework of IMCI implementation. The aim of Session 2 was to bring to light the competencies needed to provide the best care for children in specific contexts, such as primary health care, home visits and emergency care, among others.

The format of the session was a roundtable discussion, whereby each panellist was given five minutes to present and provide information about the specific competencies needed within their area of expertise. For this purpose, participants were requested to prepare a short statement around the question provided in the agenda. After the panel members gave their statements, the moderator opened the floor to reflections by other panel members and the audience to carry the discussion further.

Models of Child Health Appraised (MOCHA)

Mitch Blair provided a short statement on “What do we know about models and quality of primary health care for children and adolescents in European countries?”

There is no consensus on the best way of providing primary care for children. Different countries favour different models, such as general practitioners seeing the child in the family context or a primary care paediatrician with focused expertise. MOCHA researches which model is most effective, studying all 30 European Commission and European Economic Area countries. In terms of competencies, MOCHA assesses nursing and medical curricula in relation to adolescent-friendly health services, preventive care and chronic illness. Detailed information and published deliverables are available at the MOCHA website, but final study results will only become available by the end of 2018.

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3 Access at: www.chilhealthservicemodels.eu
**Home visits**

Bettina Schwethelm provided a short statement on “What should home visits entail, and which competencies should the provider of home visits have?”

Home visiting, as promoted by UNICEF, is informed by global evidence of what young children need to thrive and home visiting research findings. It uses the available platform provided by the health sector and spans the continuum of early care from home to health facility, addressing inequities by reaching out to those who do not present at health facilities.

Home visits should entail:

- the provision of essential information and support for prevention and health promotion;
- the early identification of need and risk based on observations of the family’s circumstances in the home environment; and
- responses to identified needs within the capabilities of the home visitor and referral when needed to other services/sectors (such as child protection, vital registration and housing), with continuing support to the family through the first three years of life.

During pregnancy, priority areas for delivery through home visiting may include:

- maternal health and nutrition (addressing micronutrient deficiencies, promoting healthy lifestyle (such as healthy body weight and physical activity), and treating sexually transmitted infections, HIV and NCDs as applicable);
- maternal well-being (addressing depression, anxiety and stress);
- early bonding and preparation for parenthood; and
- preparation for breastfeeding.

During infancy and early years, priority areas for delivery through home visiting may include:

- transition to parenthood and newborn care;
- health – prevention and management of common childhood illnesses (including immunization) and promotion of maternal health;
- breastfeeding and young child nutrition (including prevention of malnutrition, both undernutrition and obesity);
- maternal and paternal mental health and well-being;
- the parent/caregiver–child relationship and positive and responsive parenting;
- child development and well-being;
- common parenting challenges;
- child safety and prevention of unintentional injuries; and
- early identification of, and interventions for, children with developmental difficulties or who are at risk of maltreatment or abandonment.

The following human resource competencies were proposed:

- home visitors (primarily nurses) still have mostly clinical training, often at vocational high-school level; a minimum of bachelor of arts-level training, with community specialization, is recommended;
• pre- and in-service training in all components of so-called nurturing care, as well as communication and community engagement skills, is critical; and
• an upgrading of supervision systems, including normative, formative and restorative aspects for supporting the increased responsibilities and autonomy of home visitors to flexibly support families with diverse needs is key to ensuring quality, increasing staff retention and reducing burnout.

Basic principles for interacting with families (knowledge and practices) should encompass:
• promoting child rights;
• ensuring safety, with the child at the centre;
• working in partnership with families (full participation);
• building on family strengths and increasing the capacity for responsive and nurturing parenting;
• showing respect for the family and its cultural identity, and promoting non-discriminatory practices;
• ensuring transparency in decision-making;
• creating equitable access to services; and
• adopting a flexible needs-based approach.

Care for emergencies in children and adolescents

Liz Molyneux provided a short statement on “Which competencies must community members, primary care providers and ambulance staff have?”

Emergency care does not start at the door of the hospital. People who were not empowered before need now to be empowered on how to identify and refer children and adolescents with an emergency condition and provide first aid and basic life support. This needs to continue into advanced life support: they should not be separated, but brought together.

There needs to be an ability in the community to assess danger signs that require a child to be brought urgently for care, and the skills to treat a choking child. Work needs to be taken forward with teachers in schools and kindergartens, as well as with the police, to ensure that the competencies required for saving children with emergency conditions are in place. In relation to adolescents, it is particularly important to work with community members to identify signs of self-harm and how to help adolescents with courtesy and respect.

Ambulance staff need to be able to assess neonates, children and adolescents, and know which to take where and with what speed. They need the required knowledge to assess for emergencies and the equipment for providing a first-line response.

Primary care providers need to work on emergency prevention and identification of emergency signs, provide first-line responses and know where to refer children/adolescents with an emergency condition. They need to be confident in providing first-line care for burns, trauma and neonates with emergency conditions.

Primary and secondary care need to work seamlessly, so there needs to be a focus on teaching teamwork; this has not been done before, but emergency care cannot be provided without a team that is working as a team.
Emergency care is very challenging but also enormously fulfilling. It should be embedded in community and primary care.

**Pathways of referral for children and adolescents who need further investigation or care**

Sergey Sargsyan provided a short statement on "Which competencies are needed by the primary provider and which services are provided within the health system?"

It is essential to clarify which competencies primary providers need and which services are provided within the health system. Providers need to know when and how to refer, including how to carry out a correct assessment and identify danger signs.

The organization of pathways (at policy level) is crucial, and practitioners should be aware of these to enhance their referral practices. Mechanisms for so-called backward referrals should also be in place to achieve sustainability of care and integrate the efforts of care providers from different levels and fields of the health system; care providers should have access to, and information about, these mechanisms. The effectiveness of referrals and overall treatment largely depends on proper professional and interpersonal interactions and attitudes among health workers from different levels and fields, so health staff should ensure ethical norms in their relations with care providers and caregivers.

**Health workforce for care for child and adolescent health in Europe**

GalinaPerfilieva provided a short statement on “Is the workforce in Europe adequate and competent to meet child and adolescent health care needs, and what is required for improving pre-service education?”

The health workforce is a crucial part of all health systems and a vital prerequisite of quality care. It is very much dependent on the knowledge, competency and motivation of health care providers. Each country should define the composition of its workforce. In doing so, it will be important to take into account: geographical maldistribution, including between levels of care and specialist care; what strategies to adopt in terms of inefficiencies in performance; and the development of guidelines on accreditation.

The World Health Assembly adopted resolution WHA67.24 on follow-up of the Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage in May 2014. Following this, WHO adopted the Global strategy on human resources for health: workforce 2030. The four objectives of the strategy are to:

1. optimize performance, quality and impact of the health workforce through evidence-informed policies on human resources for health, contributing to healthy lives and well-being, effective universal health coverage, resilience and strengthened health systems at all levels;

2. align investment in human resources for health with the current and future needs of the population and of health systems, taking account of labour market dynamics and education policies; and address shortages and improve distribution of health workers, so as to enable maximum improvements in health outcomes, social welfare, employment creation and economic growth;
3. build the capacity of institutions at subnational, national, regional and global levels for effective public policy stewardship, leadership and governance of actions on human resources for health; and
4. strengthen data on human resources for health, for monitoring and ensuring accountability for the implementation of national and regional strategies and the global strategy.

It is also important to address the issue of how to build a workforce that focuses on health promotion and disease prevention.
Session 3. Child and adolescent health care – what is needed and how much is too much?

The objective of the session was to discuss how much care is needed for children and adolescents and how much is too much.

Integrated primary care in Europe – are children’s and adolescents’ needs met?

Altynai Satylganova presented this session.

Currently, the most common diseases, such as diabetes, are preventable, which is a key factor to consider given the rising cost of care. Studies have found incongruity in provider skills and competencies, with 56% of providers finding prevention and health promotion difficult, and 50% of general practitioners (1400) and 38% of nurses (613) holding incorrect knowledge about fat and sugar.

So, how to address skill needs in primary health care? The best practices of integrated primary health care are related to chronic diseases, but should not be limited to them.

The European Framework for Integrated Health Service Delivery takes the form of three core domains and one cross-cutting domain. The first domain defines people as the guiding focus (their needs, determinants of health and involvement as engaged and empowered individuals in health and health services). The second – services – signals key properties of services that need improvement, with specific decisions on the design and focus taking direction from the specific context of health needs and previous decisions taken. The third – systems – aims to find alignment with other health system functions at the unique interface between services and the health system for sustainable, system-wide change.

Screening examinations for children: the model of the Russian Federation

Leyla Namazova-Baranova presented the screening examination model for children of the Russian Federation. In the past, the Russian model focused on a holistic approach that prioritized prevention and universal coverage (equality and equity), while the European model focused on the disease itself, not the patient.

Presently, paediatric health care in the Russian Federation covers children from 0 to 18 years. The paediatric health care system is based on the stage-by-stage approach and defines three steps.

Primary outpatient care is provided in outpatient clinics (polyclinics), with more than 1000 polyclinics available. The ratio between children and paediatricians is 700 children for one general paediatrician. Emergency care services are also provided at primary-care level.

Secondary care is provided in paediatric hospitals. Health-resort treatment and rehabilitation centres are traditionally used for treatment completion. Each polyclinic
employs not only the so-called general paediatricians, but also paediatric subspecialists, such as ophthalmologists, neurologists, ear, nose and throat specialists, gynaecologists and allergists. Paediatric subspecialists participate in routine prophylactic medical examinations and provide specialized treatment, if necessary.

Traditionally, children's hospitals offer paediatric (diagnostic) and specialized departments: nephrology, neurology, for newborns and preterm babies, and others, including paediatric surgery. Children's hospitals may be municipal, regional or federal. The main Russian federal paediatric centre is the Scientific Centre for Children's Health.

In terms of routine screening examinations, normally every Russian child is examined by a paediatrician 21 times during the first year of his or her life (of which 10 visits occur in the first month after birth), with an additional 18 examinations between 1 and 18 years. Altogether, there are 39 routine screening examinations. The Russian system of child health monitoring is therefore based on the idea of preventive, prophylactic paediatrics, which estimates the physical health and biological maturity of the child, including his or her neuropsychological development, the functional state of organs and systems, and homeostasis. Children are examined by a variety of paediatric specialists, including psychologists, neurologists, ophthalmologists, surgeons, orthopaedists, dentists and teachers, among others.

Russian statistics and literature argue that routine screening examinations are effective.

At present, the Russian model has moved from a holistic approach towards a more disease-focused approach, while in Europe, the opposite has happened.

**Discussion**

Many participants agreed that too much emphasis has been placed on screening. Some studies have found that many children screened and diagnosed with any kind of condition are not followed up afterwards, so it is crucial to assess how the whole system responds. Additionally, it was suggested that Russian literature shows that only one third of parents follow up after screening results.

**Neurological conditions**

Colin Kennedy presented problems particular to care of children and young people with neurological conditions in the Commonwealth of Independent States.

The precautionary principle of first, do no harm, was established 2500 years ago in the Hippocratic Oath. Justification for the use of a treatment remains the responsibility of the treating physician. Discussion of management of disease is greatly facilitated by internationally agreed definitions of disease (ICD–10). Common errors include: the use of imprecise terms for which international agreement is lacking, such as raised intracranial pressure, hydrocephalus syndrome, myotonic syndrome and hyperexcitability syndrome; imprecise or incorrect use of terms for which precise definitions exist, such as perinatal encephalopathy and epilepsy; and the generalization of uncommon conditions to common clinical situations, such as attributing trembling of the chin, or feeding problems, or excessive crying, or febrile seizures to neurological disorders.

The following skills and competencies are needed in primary care in relation to neurological problems in children:
- skills for clinical examination (including basic otoscopy, assessment of vision, and monitoring of growth and developmental progress), maintained by training and continuing professional development activity;
- well-informed advice relating to vaccination (for rare cases with non-stable neurological disorders, a referral pathway to well informed specialist care is needed);
- a clear care pathway for specific disorders (such as paroxysmal disorders) tailored to the local situation and mutually agreeable to primary, secondary and specialist caregivers;
- health-system disincentives to addressing a health care problem at multiple levels of care simultaneously, and consequent discordant management plans;
- a rational screening curriculum based on evidence of potential benefit in excess of harm and clear distinction between screening and assessment;
- a common (that is, shared) training and conceptual framework among all generalists and specialists with responsibility for the care of children regarding classification of disease according to international norms, and essential tasks that a professional should be able to carry out, including return to primary clinical care; and
- arrangements in primary care for health promotion and counselling, probably led by nurses or other non-medical health care workers.

**Primary paediatric care in Europe – the German model**

Gottfried Huss provided a short overview of primary paediatric care in western Europe, an overview and reflection of the German model, and observations on well-child care.

Europe is diverse, with variations in morbidity and mortality outcomes, inequities of provision within and between countries, and difficulties with recruiting, training and retaining an appropriately prepared and competent workforce that includes paediatricians, family doctors, general practitioners, children’s nurses and other professional groups. Available health-system data for Europe are often contradictory, which makes it difficult to compare systems and provide recommendations for the Region as a whole.

The problem of provider maps is that every map contains confounding misclassifications, depending on the respondent (physician or scientist), who sponsored the research, the length and content of training and the age of children attended, all of which are subject to bias.

A joint statement of the European Academy of Paediatrics, the European Confederation of Primary Care Paediatricians and the European Paediatric Association, *A consensus on the improvement of community and primary care services for children, adolescents and their families in Europe*, provides that:

Each nation in Europe faces a different set of challenges to enable improvement of their primary/community care for children and families … systems where there is good evidence that they are currently working well should not be substantially altered, accepting the fact that there is always room for incremental improvement.

In relation to the German model, primary care paediatricians are the backbone of ambulatory care for children and provide first-contact health care until the 18th birthday.
Thirty per cent of contacts are for preventive matters: of the remainder, 53% are due to acute diseases (28.8% cough, 12.8% fever, 12.7% skin eruptions, 11% new morbidities and 5% chronic diseases, such as asthma with written action plans). The model sits on both curative and preventive care. Forty per cent are group practices (two primary care physicians and 3–6 nurses) with a tendency towards paediatric care centres. School health is non-existent and public health is weak.

A SWOT (strengths, opportunities, weaknesses and threats) analysis of primary care by pediatricians in western Europe was proposed (Fig. 1).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>Comprehensiveness of services</td>
<td>Lack of training in primary care, prevention and public health</td>
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<tr>
<td>Focused expertise</td>
<td>Competition with general practitioners</td>
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<tr>
<td>Care for chronic conditions such as asthma</td>
<td>Resistance to quality improvement</td>
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<tr>
<td>Cost–effectiveness</td>
<td>Low vaccination coverage</td>
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<td>Support from politicians</td>
<td>Networking in the community</td>
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<td>Collaboration in quality circles</td>
<td>Weak academic representation</td>
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<table>
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<tr>
<th>Opportunities</th>
<th>Threats</th>
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<tr>
<td>Recent adoption of adolescent health</td>
<td>Fighting between paediatric societies</td>
</tr>
<tr>
<td>Female workforce</td>
<td>Demography</td>
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<tr>
<td>Group practices, such as child health centres</td>
<td>Bureaucracy</td>
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<tr>
<td>New morbidities</td>
<td>Opposing politicians</td>
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In relation to so-called well-visits, the following screening and preventative measures are carried out:

- tracking of neonatal screening
- periodic measurements of growth
- sensory screening (vision, hearing)
- developmental/behavioural health
- physical examination
- anticipatory guidance
- immunizations.

There is evidence to support vaccination, prophylaxis with vitamins K and D and prophylaxis for sudden infant death syndrome. Results of anticipatory guidance in relation to, for example, violence and child neglect, accidents, adiposity and nutrition, allergies, young people’s use of media, drugs, smoking, sexually transmitted infections and teenage pregnancy, are unknown.

In relation to whether secondary prevention is effective, there is strong evidence supporting metabolic screening, congenital dysplasia of the hip and hearing disorders, unclear evidence on monitoring of growth, height and head circumference, and moderate
evidence for developmental screening and auditory and visual screening for infants and toddlers.

A SWOT analysis of well-child care in western Europe was proposed (Fig. 2).

**Fig. 2. SWOT analysis of well-child care in western Europe**

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<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
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<tr>
<td>Promoting healthy development</td>
<td>Weak networking with community services</td>
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<tr>
<td>Supported by legislation</td>
<td>Training in well-baby checks is heterogeneous and insufficient</td>
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<td>Meets expectations of parents</td>
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<td>Many interventions in one package</td>
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<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Threats</strong></th>
</tr>
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<tbody>
<tr>
<td>Wide variation and lack of standards in and between countries</td>
<td>Bad governance</td>
</tr>
<tr>
<td>More studies on effectiveness and recommendations on content, documentation and quality improvement are needed, which provides an opportunity for WHO to stimulate research and develop guidance and recommendations for countries</td>
<td>False incentives</td>
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<td></td>
<td>Heavy workload of the provider who performs checks</td>
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“Everybody wants a sick child”: the rights approach to child health

Ana Isabel Guerreiro presented the rights-based approach to child health, taking into account the IMCI findings in the European Region, and proposed opportunities for the way forward.

During the previous sessions and on the first day, some questionable paediatric practices, such as overtreatment of children, had been identified. As the presenter pointed out, however, there are many other child rights’ violations concerning child health.

The Convention on the Rights of the Child has been ratified by all Member States of the European Region and, consequently, has been translated into domestic legislation. This places an obligation upon Member States to respect, protect and fulfil child rights as enshrined in the Convention, and to report to the Committee on the Rights of the Child every five years. The vision of the Convention is that every child may reach his or her full potential. This vision must be reflected through a more holistic approach to child health that goes beyond disease management in the strict sense to encompass disease prevention, health promotion, mental health issues, early childhood development and the social determinants of health. This approach is in line with the surviving, thriving and transforming agenda proposed by the global strategy on women’s, children’s and adolescents’ health 2016–2030.

A human rights-based approach to child health requires systematic attention to child rights standards and principles in all aspects of policies and programmes and must address its key implementation principles – availability, accessibility, acceptability and quality of facilities and services, participation, equality, non-discrimination and accountability.
Key IMCI findings were presented to provide evidence of the need for a more child rights-based approach and renewed attention to health system-related issues. The IMCI review found, for example, that free-of-charge drugs for children were not always available and that the IMCI strategy did not sufficiently consider equity concerns (particularly for children living in remote areas).

Article 24 of the Convention provides that:

Children have the right to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health [and that] no child is deprived of his or her right of access to such health care services.

To ensure that all children have the right to health fulfilled, attention must be paid to principles for implementation, including availability, accessibility, affordability, acceptability and access to information.

The IMCI review in the European Region also showed that: implementation stopped in most countries and territories once support was withdrawn; integration into pre-service training was only achieved in a limited number; the focus on health-worker training was based on the assumption that a “health worker trained” leads to implementation of IMCI; and differences existed between what was provided by policy or guidelines and what was effectively delivered. Article 4 of the Convention provides that “States Parties shall undertake all appropriate legislative, administrative, and other measures for the implementation of the rights recognized in the present Convention”. This also entails that an accountable system and implementation framework must be in place for the realization of child rights.

Finally, IMCI findings showed that parents have a strong preference for treatment, which demonstrates a lack of health information. The Committee on the Rights of the Child in its General Comment 15 on the right to health has called for the promotion of health education towards appropriate health-seeking behaviour by parents. This should be taken up as a stronger activity in IMCI implementation, possibly in the community component.

The implementation of child rights through children’s rights to health must be supported by an enabling environment in which full engagement of the health system is a prerequisite. Indeed, several components must be in place to ensure an effective accountability system, with governance and coordination that includes:

- collaboration, coordination and dialogue between government ministries and service providers;
- planning, including national child and adolescent health plans or strategies, allocation of resources, availability of good quality goods and services and benchmarking;
- effective implementation through capacity-building, access to essential medicines and functional systems;
- monitoring and evaluation, including regular quality of care assessments, improvement actions and adequate health information systems;
- an appropriate national regulatory framework, including legislation, policies, guidelines and protocols; and
- available mechanisms for remedies and redress.
Based on previous quality-of-care and child rights-based work in the Region, the WHO Regional Office for Europe has proposed that the Convention on the Rights of the Child be used as a framework to improve quality of care for children. The implementation of a national framework based on the Convention would entail a long-term strategy with collaboration between different sectors, such as health, education and justice. Such collaboration would involve harmonization of the national regulatory framework, undergraduate and in-service training of professionals, processes governing quality-of-care assessment and improvement including, as an example, collaborative partnerships and supportive supervision, and enhanced national reporting to the United Nations Committee on the Rights of the Child in the context of Article 24 on the right of the child to the highest attainable standard of health.

**How does the list of essential medicines promote rational use of drugs?**

Jane Robertson provided a short statement on how the list of essential medicines may promote rational use of drugs.

The model was developed in 1977, since when there have been two models, with a separate one for children. A commission updates the lists of essential medicines every two years. The lists are recognized as valuable evidence-based tools for providing quality of care for children.

Medicines for children should be available at all times at appropriate doses, and be affordable. It is important to recognize that the lists of essential medicines are not lists of cheap medicines for poor people. The general guiding principles for the essential medicine lists are that they offer a limited range of carefully selected essential medicines that lead to better health care, better medicines management and lower costs. Essential medicines are defined as those that satisfy the priority health care needs of the population and are selected with due regard to disease prevalence, evidence on efficacy and safety, and comparative cost–effectiveness.

The lists on their own are of limited value, so should be seen in a broader context; for example, they should guide procurement and inform reimbursement. Professionals must be aware of the lists and, importantly, these must be related to guidelines. It is important to reflect not only on the supply side and focus on procurement and distribution, but also on the demand side, linking it to guidelines to ensure that the medicines are used in practice.

**How do WHO guidelines on antimicrobial resistance promote less use of antibiotics in children?**

Jane Robertson provided a short statement on how the WHO guidelines on antimicrobial resistance promote less use of antibiotics in children.

European Union countries are covered by European Commission guidelines on prudent use of antimicrobials in human health, but guidance in the rest of Europe tends to be weak, with few controls on advertising and perverse practices, such as incentives for practitioners. At the same time, the adoption of national action plans to address antimicrobial resistance presents unique opportunities. The WHO Regional Office for Europe is working with 18 non-European Union countries on data on use of antibiotics. A
number of these note the need to develop protocols, including for primary health care. The sale of antibiotics over the counter, particularly without a prescription, remains a cause of concern. The essential list of medicines may serve as guidance to develop this work.

Recently, the antibiotic list and drugs for cancer underwent major revision based on systematic reviews and international guidelines.

**Over-investigation, overtreatment and over-hospitalization of children**

Susanne Carai provided a brief statement on over-investigation, overtreatment and over-hospitalization of children.

The regional IMCI review found that systems are often constructed in a way that incentivizes hospitalization instead of outpatient care, overtreatment instead of appropriate use of drugs and use of expensive drugs instead of indicated drugs. Low salaries in many settings require doctors to generate additional income.

While prescribing patterns improved and hospitalization duration decreased immediately after the introduction of IMCI, these achievements were not sustained. All of the 15 Member States reviewed and the territory of Kosovo reported persistent overuse of antibiotics, and 12 reported doctors prescribing antibiotics to increase revenues.

The presenter quoted one key informant who had stated:

> Nobody pays for a consultation alone, so it is in the interest of the paediatrician to attach many diagnoses to a child and see the child often, creating a “chronically sick child”. The situation is even worse than it was in Soviet times, due to commercialization of medicine.

Eleven countries and territories in the IMCI review reported that parents are accessing secondary care directly, as there reportedly is no trust in primary care services.

**Why do children still not get the vaccines they need at health facilities?**

Liudmila Mosina provided a brief statement on the reasons why not all children are getting the vaccines they need.

Many practitioners in European Region countries have concerns about vaccines, believing that they affect the immune system of children or may cause illnesses. This mistrust and scepticism is due to the lack of knowledge and information received during training, mistrust of the evidence or influence by antivaccination debates. Practitioners therefore delay vaccinations as much as possible. This is a common problem throughout countries in the European Region.

**Discussion**

The discussion among participants evolved mainly around vaccines. It was stated that the supply and implementation side of vaccination must be strengthened in the revised IMCI or related child health guidelines. The lack of conviction and professionalism concerning vaccines was considered to represent questionable practice. An example of national strategies to overcome related problems was given, with Italy recently adopting legislation making it compulsory for children to be vaccinated to enter school.
Session 4. Considerations for the way forward – technical content areas

The objective of the session was to identify additional technical content to be included in revisited IMCI guidelines for care providers dealing with children and adolescents, taking into account key interventions and priorities for the surviving and thriving agendas, lessons learnt from IMCI implementation, and emerging child and adolescent health conditions in the European Region.

Introduction

Participants were to take into consideration that the target audience of the Pocket book for primary health care is primarily primary health care providers (family doctors and general paediatricians), who should provide high-quality, evidence-based clinical care to children and adolescents. Technical content should also reflect the training level of providers and equipment availability in an average primary health care facility in central and eastern European and Commonwealth of Independent States countries, such as centrifuge, microscope, stethoscope and urine dipsticks.

Each participant presented on a specific area of child and adolescent health, setting out the case for that specific area being integrated in the revisited IMCI guidelines. Specifically, participants should have discussed what primary health care providers should know and be able to do in relation to the specific area of work. A contestant challenged the assumptions presented by giving a counterstatement after each presentation.

Early childhood development

Ilgi Ertem provided a short statement to argue for the importance of introducing early childhood development in future child health guidelines. Early childhood development is enshrined as a child’s right in the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities. There is evidence-based good practice and guidelines available from the American Academy of Paediatrics and, as Heckman states, investment in early childhood development has the highest financial returns. It is also part of the SDG framework (target 4.2), and developmental disabilities are the most prevalent morbidity group in childhood.

Where IMCI was paired with early childhood development, practitioners were more motivated and showed better skills in communication and conveying IMCI messages. The presenter asserted that every child health provider must have the theory and evidence-based knowledge, skills and attitudes (establishing partnerships with caregivers) for preventing risks and promoting strengths, and to enable early identification, leading seamlessly to individualized holistic management, early intervention and follow up.

Early childhood development: counterstatement

Olga Komarova provided a counterstatement, arguing against the reasons for including early childhood development in future guidelines. It was emphasized that most mortality cases under 5 are related to neonatal causes, and that it is the responsibility of parents, not
doctors, to care for young children. Prioritization of child health areas was also considered an important matter for discussion. Finally, it was argued that early childhood development as a strategy is too long-term.

**Child maltreatment prevention**

Yongjie Yon provided a short statement arguing for the importance of introducing child maltreatment prevention in future child health guidelines. It is important to invest in child maltreatment due to the high prevalence of violence against children in the Region; child maltreatment is a common and leading public health problem throughout Europe, with several short- and long-term health implications. Evidence-based interventions to prevent child maltreatment exist and need to be explored on how to integrate these interventions into existing child’s health interventions including home visitation programmes delivered by public health nurses or other health professionals as part of routine maternal and child health services; and training of health care workers to foster awareness of the needs of children in high-risk situations. Such training should be mainstreamed into the curricula of health and other professionals. Health practitioners should have a clear role in preventing maltreatment of children, recurrence and impairment.

WHO clinical guidelines on responding to children and adolescents who have been sexually abused provided the following good practice statements for health care providers to:

- provide first-line support that is gender sensitive and child or adolescent centred, in response to disclosure of sexual abuse;
- seek to minimize additional trauma and distress for children and adolescents who disclose sexual abuse;
- seek to minimize additional harms, trauma, fear and distress, and respect the autonomy and wishes of children and adolescents;
- accurately and completely document findings of the medical history, physical examination and forensic tests and any other relevant information, for the purposes of appropriate follow-up and supporting survivors in accessing police and legal services, while at the same time protecting confidentiality and minimizing distress for children or adolescents and their caregivers;
- offer safe abortion to the full extent of the law;
- balance the need to take into account the best interests of the child or adolescent with their evolving capacities to make autonomous decisions;
- facilitate the timely uptake of services by children and adolescents who have been sexually abused; and
- create an enabling service-delivery environment and support health care providers in carry out their tasks and responsibilities related to caring for children and adolescents who have been sexually abused.

**Child maltreatment prevention: counterstatement**

Elena Kesheshian provided a counterstatement to argue against including child maltreatment prevention in future guidelines. She called for clear definitions, assessments of whether practitioners are able to make the right decision, and careful consideration of where children will be placed once it has been determined that they are in danger.
**Chronic conditions**

Jill Farrington provided a short statement on the importance of introducing NCDs in future child health guidelines. SDG 3 includes a target on reducing premature death from NCDs. Several conditions have high prevalence and death rates in Europe, with significant health system costs. NCDs also lead to pupil absence from school.

The goals of addressing NCDs should be: improving quality of life; avoiding hospitalization; maintaining children in school; keeping children active and promoting their health; and improving self-management (by preparing for transitions).

The competencies practitioners must have may differ by disease. Management of children with asthma, for example, will require practitioners to lead through developing asthma plans, prescribe, provide medication advice and techniques, and deliver health promotion activities in areas such as tobacco use. For children with epilepsy, diabetes and cancer, practitioners will need to liaise with specialists (through shared plans), be capable of recognizing signs early and provide support for additional needs, including mental health and special educational needs.

Common competencies practitioners must have include:
- early detection, referral, treatment plans and prevention of complications;
- early intervention to address deterioration in control;
- recognition of signs and symptoms, with appropriate responses;
- holistic approaches that include psychological and practical support, in addition to medical expertise;
- advice to families regarding sports participation (for children with, for instance, diabetes or epilepsy) and precautions during physical activity, if any;
- family support and education; and
- advocacy.

**Chronic conditions: counterstatement**

Michael Rigby, referring to recent discussion in *The Lancet*, suggested there has been a move away from the term NCD towards use of the term socially caused diseases. In the child context, however, NCDs should be termed learn-to-live-with diseases, and the focus should be on best meeting the needs of the child, who knows well how the condition and treatment affects him or her and manages the condition by, for instance, adjusting medication dosages appropriately. The child is living with the disease, so it is crucial to listen to him or her, which raises issues around children’s autonomy. It is important to look at the child’s ecosystem – the child is not living with the condition alone, and the needs of siblings and the whole family must be considered. Other issues to be addressed include involving schools as partners, recognizing the impact of NCDs on family budgets, and “getting the act together” around the child and the family.

**Over- and undernutrition**

Jo Jewell argued for a particular focus on expanding work on overweight in children, although the European Region also has countries in which other forms of malnutrition (stunting, wasting, micronutrient deficiencies) continue to be issues for children; it may therefore be considered a double burden.
In terms of competencies that practitioners must have at primary health care level, accurate assessment and classification of nutritional status is vital, yet routine growth monitoring (trends) do not always take into account over- and undernutrition nor relate to the appropriate age/sex reference ranges, which change throughout childhood. Support for infant feeding also needs to improve, both in terms of exclusive breastfeeding and timeous and appropriate complementary feeding. Dietary and activity guidelines are often complex, and advice on nutrient intake needs to be better translated to practical guidance on diets and foods.

Practitioners must also be able to provide dietary counselling and guidance on optimal nutrition that motivates and supports parents to change behaviours. They must be competent in management of children and infants with acute or chronic malnutrition and overweight and obesity, and have appropriate communication skills to enable them to talk to children and families about obesity.

WHO guidelines on assessing and managing children aged under 5 at primary health care facilities to prevent overweight and obesity in the context of the double burden of malnutrition state that:

- all infants and children under 5 years presenting to primary health care facilities should have their weight and length/height measured to classify nutritional status according to WHO child growth standards;
- caregivers and families of infants and children under 5 years presenting to primary health care facilities should receive general nutrition counselling, including promotion and support for exclusive breastfeeding in the first 6 months and beyond, along with timeous introduction of appropriate complementary foods; and
- children aged under 5 years who are identified at primary health care facilities as being obese should be assessed and an appropriate management plan should be developed (this can be done by a health worker at primary health care level, if adequately trained, or through referral to a clinic or local hospital).

At health system-level, there must be an assessment of the underlying causes of paediatric obesity. Effective delivery of such services requires not only some transformation of guidance to professionals, but also in-service training to equip them with the necessary skills.

**Over- and undernutrition: counterstatement**

Reinhard Klinkott provided a counterstatement that questioned the evidence on the value of counselling for changing behaviour of children who are obese. He asked what the right tool is to deal with obesity, and whether dealing with obesity should be a responsibility for practitioners or should be addressed at policy-making or societal level.

**Newborn care**

Mavjuda Babamuradova provided a short statement arguing that newborns face the greatest risk of death within the first few days of life. Lack of sufficient quality care contributes globally to 2.6 million children dying in the first month of life (2016 figures), with approximately 7000 newborn deaths every day, most of which occur in the first week (about 1 million die on the first day and close to 1 million within the next six days).
Neonatal mortality contributes 53% of child mortality in Europe. The statistics for maternal and newborn mortality are all the more staggering because so many of the deaths can be prevented.

Strengthening the newborn health interventions in each component of IMCI would contribute to saving many newborn lives and would also benefit IMCI. The original IMCI guidelines focused on sick infants, and the updated version included sick newborns from 0 to 2 months. The revisited IMCI should be focused on healthy newborns/infants through preventive care, including healthy home behaviours and care, engaging men in newborn care, counselling and education.

Newborn health should be placed higher on local and international agendas. At national level, health system investment should be adequate, supportive supervision and mentoring should be available, and assessment, monitoring of implementation of recommendations and evaluation delivered.

**Newborn care: counterstatement**

Ralf Weigel argued that after 2–3 days post-delivery, newborns and mothers are discharged home and should be followed up in the first month of life. This demands that the already stretched health-system workforce takes on additional tasks, involving extra training and the initial investment this requires.

If too much attention is given to healthy newborns, the needs of newborns with problems that need attention may be neglected. Newborn care is an intervention that is relatively difficult to monitor, so how, for example, can the success of home visits be measured?

**Tuberculosis**

Martin van den Boom provided a short statement to argue on the importance of introducing tuberculosis (TB) in future child health guidelines. Two recent technical advisory group recommendations focus on measures to prevent transmission and the need to develop guidance on ambulatory care. TB in children is rarely bacteriologically confirmed. Direct examination of sputum smears and tuberculin skin testing suffer from suboptimal diagnostic performance, partly because TB in children is often paucibacillary, so bacteria may be absent or less easily detectable in sputum. Children are also more likely to have extrapulmonary TB, which is more difficult to diagnose bacteriologically than the pulmonary form.

Children often find it difficult to produce sputum, and other means of obtaining a bacteriologically appropriate sample, such as gastric lavage, are invasive and cost–intensive. Reasonable access to facilities to conduct this kind of intervention may not be available in any case. TB in children is therefore a condition that relies much on clinical evaluation and anamnesis, based on a combination of signs and symptoms that are not specific to TB.

Paediatricians who diagnose TB do not always report cases to public health authorities. Childhood TB is not usually a public health priority and effective links between national TB programmes and health care facilities, including ambulatory and inpatient settings in which children are often diagnosed, are lacking. Reporting of cases is therefore incomplete and often not supported by a cross-sectoral, comprehensive legal framework.
TB cases are less likely to be diagnosed among children than adults in countries with a high TB burden. Sick children may be evaluated in facilities with limited or no capacity to diagnose childhood TB, and access to quality diagnosis and care services is often limited.

TB is a top-10 cause of death in children worldwide and a key omission from previous analyses of under-5 mortality. Almost all these deaths (96%) occur in children who did not receive TB treatment, implying substantial scope to reduce this burden. It is important to note that the current global mortality rate of 21% is about the same as in the era before treatment was invented.

There are several challenges related to management of TB: the illness in children is often missed or overlooked due to non-specific symptoms and lack of a sensitive and child-friendly diagnostic test (not based on sputum). Health workers in TB programmes and other health services often lack sufficient knowledge on, and capacity for, prevention, diagnosis and management. Systematic screening for TB and isoniazid preventive therapy for children under 5 years and children living with HIV are rarely implemented or reported, and community knowledge and engagement is lacking.

Child-friendly formulations were available only to a very limited extent until recently, and there are as yet no child formulations of second-line TB drugs. The current TB vaccine (Bacillus Calmette-Guérin, or BCG) protects young children against the most severe forms of TB only (tuberculous meningitis), but does not prevent the transmission of TB from an infectious contact.

The case was clearly made that as respiratory complaints represent one third of presenting reasons for childhood TB consultations in medical practice (at primary health care level), and these are in the vast majority of cases also found in TB, the disease should figure very highly on the list of differential diagnoses of physicians in general medicine, primary health care and paediatrics. Improving understanding and knowledge among these health care workers, with enhanced skills on how to diagnose, refer, treat and manage, will improve the burden and reduce the suffering of children considerably and effectively.

**TB: counterstatement**

Olena Starets questioned whether integration of TB in the IMCI guidelines can contribute to the prevention and case management of the disease, and argued that TB is not a common childhood disease. Even in European countries with higher TB rates, such as Ukraine, the estimated number of children in the age group 0–14 year with the disease is 4400 (according to the most recent WHO Ukraine TB country profile). It is important to consider whether IMCI should be integrated with the TB programme and to develop appropriate training materials.

**Adolescent health**

Valentina Baltag provided a short statement to argue on the importance of introducing adolescent health in future child health guidelines. She argued that WHO core competencies in adolescent health and development for primary care providers should guide additional content and presented some of the core domains for competencies. These include basic concepts in adolescent health and development and communication
skills, law, policies and quality standards, and clinical care of adolescents with specific conditions. Five algorithms based on competencies should be included:

- HEADSSS (home, education/employment, eating, activity, drugs, sexuality, safety, suicide/depression) assessment;
- the structure of the consultation with an adolescent (including time alone);
- motivational interviewing;
- assessing adolescent capacity for autonomous decision-making; and
- applying quality standards in clinical practice.

It is also important to take into account the fact that job aids are relatively outdated and too basic for the European context.

**Adolescent health: counterstatement**

Marzia Lazzerini provided a counterstatement arguing against including adolescent health in future guidelines. She questioned whether it is appropriate and realistic to include all adolescent health and development-related information and argued that it would be too large and complex.

**Mental health**

Elena Shevkun provided a short statement on the importance of introducing mental health in future child health guidelines. She argued that physical and mental health are indivisible, and that childhood and adolescence set the tone for the whole of life. Europe has a high burden of mental disorders, comorbidity and suicides. Some of the main challenges include high demand for mental health interventions to address maternal and newborn health promotion and disease prevention (public health level) and to diagnose and treat mental disorders (individual level). There is also low provision of such services at organizational level – services are separated, with limited coordination – and at human-resource level, with relevant practitioners having limited skills and knowledge.

The WHO mental health department has prepared the mhGAP intervention guide for mental, neurological and substance use disorders in non-specialist health settings. This evidence-based technical tool has a chapter on child and adolescent mental and behaviour disorders that could be adapted and integrated as a module in future child health guidelines. WHO’s mhGAP intervention guide 2.0 app was also released recently.

Other useful tools and guidance that could be used for strengthening mental health services for children and adolescents include:

- maternal mental health interventions to improve child health;
- interventions for preventing child abuse;
- effective strategies for detecting child maltreatment of children and young people within the context of mental health and developmental assessment;
- interventions for management of children with intellectual disabilities;
- community-based rehabilitation;
- psychosocial interventions for treatment of behavioural disorders; and
- psychosocial interventions and treatment of emotional disorders.
It was emphasized that the tools alone will not solve the problem. Issues around policy frameworks, legislation, strengthening human resources (including the need for professional associations that promote more integrated approaches), organization of services, intersectoral teamwork and other issues will need to be addressed.

**Mental health: counterstatement**

Jon Simon provided a counterstatement arguing against inclusion of mental health in future guidelines. Rigorous strategic planning on the future of child health is much more about making decisions about what should not be done, rather than what should. The current workforce is already struggling with what they have to manage, so why should they also have to deal with mental health issues? The focus should be on addressing people’s resilience to prevent mental health conditions. Parents, teachers, families and communities, equipped with the requisite skills sets, should have greater responsibility for preventing mental illness.

**Discussion**

There was discussion around the role of e-health. Current activity is largely uncontrolled, so standards should be developed. It is important to consider in what ways new tools should support child and adolescent health and WHO should have a role in setting the agenda.

It was argued that it is crucial to invest in the community component of IMCI and, therefore, to clarify what can be carried out by primary health care and other community-level practitioners.

There was overall agreement on the need for a coherent strategy for sustainability. Monitoring and assessment must also be part of the redesign of child health. A coherent strategy will be dependent upon acceptance by practitioners, so it was suggested that it is important to engage with nurses and doctors in the redesign of child health guidelines.

Content of sick-child visits was discussed, but it was recognized that other contacts between providers and children, such as healthy child visits and screening visits, also exist. The redesign of child health guidelines is more about doing things differently rather than adding new things; the curriculum has focused too much on the management of diseases, rather than broader approaches. It is good practice to use algorithms for different conditions, but it is not sufficient, participants argued. As well as thinking about additional areas, WHO should also consider what areas should be removed from the original guidelines.

A modular approach that accounts for countries’ diversity and includes a more staged approach, policies and guidelines, competencies and other components, could be considered for the future.

The re-design of child health could include not only new technical areas, but also the focus and approach to child and adolescent health, with consideration of the most appropriate channels (promotion, prevention and curative). Health-systems strengthening and community components have not worked to their full potential in the European Region, and some of the technical areas can be addressed through, for example, the community component.
Session 5. Changing professional practice

The objective of the session was to discuss ways to improve professional practice and identify priorities for the European Region.

**The EuTEACH model of competencies for adolescent health (pre- and in-service training)**

Pierre-Andre Michaud presented the European Training in Effective Adolescent Care and Health (EuTEACH) model of competencies for adolescent health in pre- and in-service training. Data show clearly that injuries, mental health conditions, common infectious diseases, and sexual and reproductive health problems are leading causes of morbidity and mortality in young people. The public health community has been successful in improving the health of infants and children younger under 5 years in past decades, but challenges related to mental health issues, self-harm, substance abuse and sexually transmitted infections among adolescents remain.

Literature has suggested that: practitioners should have communication and technical skills; practices should be guideline-driven; prevention, including counselling, should be part of health practice; care environments should be appropriate; work should be taken forward through an interdisciplinary network approach; participation and shared decision-making with adolescents is essential; it is important to manage legal and ethical issues; and specific health issues, such as sexual and reproductive health, mental health and chronic conditions, need to be managed. The European framework for quality standards in school health services and competences for school health professionals could be taken into account.

EuTEACH was established in 1998. It is a curriculum developed by a group of European professionals and aims to:

1. set quality standards for medical/health education as applied to adolescents and young adults (10–24 years);
2. support and run international/national/regional courses on adolescent health and medicine; and
3. initiate and sustain the development of adolescent health multidisciplinary networks.

EuTEACH provides a modular website tackling teaching issues through various training sessions, such as summer schools, training of trainers and regional training courses. It could contribute to the future redesign of child health by suggesting procedures and algorithms for specific situations and e-health, and offering training on counselling techniques (motivational interviewing), legal and ethical aspects, unexpected pregnancy, sudden abdominal pain, suspicion of sexually transmitted infection, severe substance use (alcohol intoxication), self-harm, suicidal conduct, violence and abuse, transition for adolescents living with long-term conditions, making services youth-friendly, and integration of preventive and health promotion activities in primary care (including emergency consultations).
The ETAT plus experience

Mike English presented the Emergency Triage Assessment and Treatment (ETAT) plus experience. His presentation focused on promoting development and ownership of national guidelines and measures of quality of care.

It is important to recognize the development of national consensus and moving from thought to action as a political, social and psychological process. There are no quick fixes – the system or organizations are, to some extent, herding towards goals rather than directing. There must be compromise – “better” rather than “best” – with the establishment of long-term partnerships.

One of the challenges with IMCI is its lack of acceptance. It took a long time for people to get into the system and it is difficult to say whether it did in the end. The health community must recognize that while it may be very good at advising and developing guidelines, it is less efficient in engaging with the wider health system. At individual level, it often is difficult to change practitioners’ behaviour. It will therefore be important to build skills and consensus that are scientifically sound, credibly developed and endorsed, which contextually are a good fit, and which have a clear target group. Quality monitoring and quality improvement are crucial elements of an accountability system.

A matrix model of child health based on different levels of competencies

Martin Weber presented a potential matrix model for child health based on different levels of competencies (Fig. 3), delineating tasks and competencies required for managing common childhood conditions based on prescribing privileges and available diagnostic facilities. Discussion of health-systems requirements and needs for reform were found to be particularly neglected in most countries when IMCI was being introduced. This matrix can help address issues in training, professional privileges, referral pathways and use of drugs (particularly antimicrobials), resulting in better treatment for children.
**Fig. 3.** Proposed revised IMCI approach: matrix with definition of tasks and competencies required for managing common childhood conditions based on privileges of prescribing antibiotics and available diagnostic facilities

<table>
<thead>
<tr>
<th></th>
<th>Cough</th>
<th>Diarrhoea</th>
<th>Fever</th>
<th>Young infant</th>
<th>Counselling, health promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse without right to prescribe IMCI minus</td>
<td>Assess, refer fast breathing</td>
<td>Assess, manage watery diarrhoea</td>
<td>Assess and refer</td>
<td>Assess and refer, counsel feeding problems</td>
<td>Breastfeeding, nutrition, danger signs, when to seek care, care for development</td>
</tr>
<tr>
<td>Nurse with right to prescribe/fieldsher IMCI</td>
<td>Treat pneumonia</td>
<td>Treat dysentery, treat severe dehydration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family doctor, general practitioner IMCI plus</td>
<td></td>
<td></td>
<td>Assess child with fever, viral illness, UTI, ear infection, sore throat, urine dip sticks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatrician</td>
<td>Differential diagnosis pneumonia, bronchiolitis, asthma</td>
<td>Differential diagnosis persistent diarrhoea, diarrhoea and malnutrition</td>
<td>Differential diagnosis, possible sepsis</td>
<td></td>
<td>Diagnosed developmental delay, failure to thrive</td>
</tr>
<tr>
<td>Hospital</td>
<td>Viral tests, x-ray, CRP</td>
<td>Viral tests, CRP</td>
<td>Observation &amp; management of possible sepsis, jaundice, LBW</td>
<td></td>
<td>Lab tests, further diagnostic tests</td>
</tr>
</tbody>
</table>

**Note:** arrows indicate potential task-shifting according to health system set-up and requirements.
IMCI minus: IMCI for nurses who are not allowed to prescribe; includes counselling, breastfeeding, assessing for danger signs and referral.
IMCI plus: IMCI for trained doctors; will include IMCI plus the use of diagnostic tools, such as the stethoscope and otoscope, and laboratory tests etc., to move to a differential diagnosis and take into consideration the history of a patient, as known to a family physician or paediatrician.
CRP - C-reactive protein test; UTI - urinary tract infections, LBW - low birth weight.

**Discussion**
There was discussion among participants on WHO’s role in defining competencies for health care workers.

**Group work 2**
After the presentation, the group split into three for group-work discussions on the following topics.

- **Topic 1.** What is the most useful tool (guidelines, job aid) to support primary health care providers dealing with children and adolescents? (Reflection on the format of a pocket book and/or other suggestions, keeping in mind the feasibility of integrating the tool into pre-service training).
- **Topic 2.** What areas of competencies does a primary health care provider dealing with children and adolescents need in relation to: child maltreatment; chronic conditions; over- and undernutrition; newborn care; TB; early childhood development; adolescent health; and mental health?
- **Topic 3.** What actions are to be undertaken to ensure implementation of the guidelines, taking into account child rights and health systems issues identified during the meeting and the IMCI review?
The overall objective of the group work as to provide recommendations on the way forward for WHO guidelines and guidance materials for children and adolescents in Europe and the strategy to implement them.
Day 3

Mekhri Shoismatuloeva provided a recap of Day 2. Following this, each group fed back on the work of the previous day.

**Group 1**

Group 1 agreed that the pocket book or a tool of similar format should be given preference, reflecting the fact that the previous version was popular and accessible. The IMCI Computerized Adaptation and Training Tool (ICATT) could potentially be revisited, with potential improvements including a more child-centred approach, a provider-friendly format and hyperlinks to more content. An app should be prepared as a variant of the previous tool. The new tool should be complemented by a training tool (ICATT, simulation for pre-service (as implemented in the Russia Federation) or other).

The group agreed that the target practitioner for the European Region is the key primary health care provider, and that in-country adaptation is essential. The three technical areas under discussion – child maltreatment, chronic conditions and over- and undernutrition – should be included in future child health guidelines.

In relation to child maltreatment, practitioners should have competencies related to both physical and emotional abuse, and counselling and communication skills. They should be able to carry out early detection and use rapid screening tools, have a low threshold of suspicion and be aware of national legal frameworks.

Practitioners should be aware of referral networks for chronic conditions, carry out home visits, provide continuity of care, ensure adherence to treatment, deliver vaccinations, manage complications and be able to prioritize (that is, distinguish prevalence, severity and enable transition to adult care). Options on chronic illnesses that could potentially be introduced to future child health guidelines include asthma, diabetes mellitus, disability, palliative care and malignancies.

In relation to over- and under-nutrition, practitioners should be able to perform growth assessments (including body mass index), have knowledge of risk factors, principles of management and communication skills, and be aware of the support network.

The group decided that it would be important to start the booklet with a statement about the Convention on the Rights of the Child in the context of the setting and what it means for primary health care practice, taking into account the organization of primary health care and the fact that there are diverse types of providers in the European Region. Consideration should be given to the concept of the primary health care team versus single providers.

**Group 2**

Group 2 agreed that the existing pocket book was well received, particularly by medical students and nurses, and that is was in an appropriate format. It would be important to brand potential new guidelines for primary health care clearly. The group discussed different ways of maximizing use of the tool, including the example of the protocol book developed in Kenya with local algorithms only. They also identified, however, that if all suggested technical content was to be added, it will be difficult to keep to a small format. It
is therefore important to assess whether some areas – mental, reproductive and HIV-related health – should be included.

The group agreed that staff need to know how to assess a condition and to refer, but they probably do not need more details than that. It was suggested that WHO should prepare a compendium of guidelines for easier access and that future work should contribute to implementing existing guidelines from different departments.

Finally, the group felt that child health guidelines should not be implemented if neither commitment nor a longer-term plan are in place.

In relation to newborn care, the group agreed that practitioners should have the following competencies. They should be able to: check, examine and carry out risk assessments; provide counselling on various topics; perform cord care; provide support for breastfeeding and bonding; and provide special support for low-weight babies (less than 2000 g). There should be a clear checklist to follow for healthy babies and clear pathways when something is found. The group emphasized that newborn care is already part of IMCI guidelines.

The group agreed that in relation to TB, practitioners should be able to trace-contact (child to adult, or adult to child), case-find and use algorithms to identify those who need presumptive treatment. Unless the role is taken on by the TB programme, they should also be able to provide direct observation of therapy and help children to take their drugs regularly and complete treatment, achieving cure and preventing the development of drug resistance.

The group had several recommendations in relation to child rights and health system-related issues. It is difficult to include child rights standards when there are no standards against which to compare treatment (for instance, duration of stay or discharge criteria for certain conditions). These present challenges for primary health care workers, so some of the issues need to be sorted top–down. It is also challenging for primary health care workers to work so close to patients when something goes wrong.

In relation to health systems, the group discussed the target population of the future pocket book and agreed that it should be anybody who looks after children, including nurses, but that it should be up to countries to decide. WHO should advocate for changing the role of nurses so they are allowed to prescribe. It is important to address system problems, such as having five specialists on a single ward or patients bypassing primary care, and repurpose staff as part of the rollout.

A crucial question on the use or usefulness of the pocket book is about when to introduce its content to professionals, as it takes time (years) to train, support and monitor workers’ performance. Implementation of the pocket book in the past has been detached from IMCI and, consequently, has been difficult to integrate into pre-service training. There were good indicators for training health care workers on the pocket book, but less so for implementation and change in practice.

For the future, it would be important to have an attached package for monitoring outcomes. It is important to look at what countries are doing already and be prepared to modify, so that guidelines or strategies are embedded in something that is sustainable, such as continuing medical education; otherwise, the programme will fall flat when the money ends.
Finally, it is important to recognize that ownership lies with countries.

**Group 3**

Revisiting the IMCI strategy should start by defining the goal and objectives of the envisioned strategy for child and adolescent health. The strategy should be moving from the child survival agenda to encapsulating thriving of children and adolescents. While all preventable deaths of children and adolescents must be averted, the strategy must aim to achieve the full potential of all children and adolescents. The group discussed that the Convention on the Rights of the Child defines childhood up to 18 years, while recognizing that adolescents are defined to the age of 19. The strategy must employ a life-course approach, moving beyond age 5 and explicitly including adolescent health and well-being.

The revised approach should be tailored to the specificities of the European Region and be more sophisticated than the original IMCI. The term IMCI plus was coined and discussed, but eventually dismissed. While many health workers have been trained in IMCI and no resources can be wasted, a change in perspective is required, with new branding and a new name to bring more countries on board and dismiss the notion that IMCI is for poor settings only.

It was suggested that the progression of the technical content format move from a pocket book to an electronic application (and potentially online training) for primary care providers dealing with children and adolescents. It should be structured in a modular way, with core content of common childhood conditions like fever and cough that are and will remain relevant for all contexts. Additional modules in areas such as prevention, promotion, early identification of problems of early childhood development, mental health and specificities of adolescent health would extend the technical content. Existing materials (such as the WHO mhGAP materials for mental health) should be appraised critically and used as relevant. It should be seen as building on the strengths of the existing pocket book, not as a replacement for something that is outmoded. Additional topics the group would like to see being addressed include epilepsy and the transition of children and adolescents with chronic conditions to adult care services.

Implementation considerations include the following:

- WHO should lobby for the development of strategies for child and adolescent health that put children and adolescents at the centre and provide them with what they need through different channels;
- in relation to child-centred versus family-centred approaches, the child (particularly younger children) should also be seen within the context of the family;
- WHO should advocate for changes to medical and nursing curricula;
- insurance payment schemes need to be reviewed;
- in-service training is inefficient, with investment in pre-service training required – the 10-day in-service training course used in some countries cannot substitute for sound pre-service education.
- online training is the modern model of continuing medical education; and
- child and adolescent health strategies should hold countries accountable for delivering quality care to children and adolescents.
Discussion
The tertiary care system needs to be involved to achieve change and enable mutual understanding. There should be a focus on the so-called pull agenda by UNICEF and WHO, instead of the push agenda. Instead of producing a world health report, they should work with countries to develop country-level reports on progress around specific targets and benchmarks that countries agreed to achieve. IMCI plus will need to be embedded in the health system.

Session 6. Child and adolescent health care needs in humanitarian emergencies

The objective of the session was to consider the question: are additional guidelines needed to address child and adolescent health care needs in humanitarian emergencies?

What is different when providing care to children in humanitarian emergencies – a personal perspective

Andreas Hansmann delivered this presentation.

Humanitarian crises vary significantly in nature across regions, but children form a large proportion of the affected population in most instances. It is therefore important to tailor responses to individual situations, and to the needs of children and adolescents in particular. Standard approaches need to be adapted in some situations, but evidence-based approaches exist in other settings and should be enforced.

Displaced populations have increased health needs and are often cut off from access to preventive and curative services as transportation becomes difficult or impossible. Children therefore arrive late for treatment – all too often, they arrive too late. Mobile clinics offering preventive and curative services could be offered in these instances.

Families are often forced to starve over extended periods: in Mosul, for example, small children were eating nothing but rice for up to three months. Existing standard malnutrition guidelines should be employed.

Up to a third of refugee camp inhabitants are pregnant women, and breastfeeding rates are often low. It is easy, but wrong, to offer formula milk in these circumstances. Instead, training of community volunteers who support breastfeeding is a possible alternative to ensure basic principles of infant feeding standards are adhered to (an example from Nurture Project International was published in *The Lancet* of 26 August 2017).

Children with disabilities or mental health conditions require additional attention in emergency settings. They are more vulnerable to experiencing pain or discomfort as they are often unable sufficiently to express their needs. These patients are often challenging for health workers, as they are difficult to feed and require additional time, skills and resources.

Other children at increased risk when their support networks break down are those with chronic conditions such as diabetes, asthma and cardiac conditions. Orphans comprise another group of vulnerable children, and it is a challenge to trace relatives and obtain
legal documents for them. In some settings, Facebook has been used to trace relatives, a role frequently taken up by the International Committee of the Red Cross, showing the fluid situation in this field. There are, however, no fixed procedures on how to identify suitable individuals or institutions to which they could be referred.

Paediatric care in humanitarian settings varies considerably and is often very fragmented, partly due to difficulties accessing national or evidence-based treatment guidelines. The WHO pocket book for hospital care of children, for example, is not available in Arabic, and there are no national paediatric treatment guidelines in Iraq. Finding evidence-based, simple treatment regimens for the treatment of diabetes mellitus that include culturally appropriate graphic food lists, for instance, turned out to be difficult. A comprehensive list of online resources appropriate for emergency settings would be useful.

International humanitarian nongovernmental organizations are notoriously difficult to coordinate and often have their own culture and approaches to identifying target populations, ensuring staffing (local/international), integrating with health systems, defining security needs, applying clinical guidelines and identifying when to begin or end an intervention. This makes it difficult to define and enforce standards for health workers in relation to cultural, language and medical skills. There are also no standards for equipment (some health facilities lack the most basic tools, such as paediatric stethoscopes, while others of similar size have ventilators), essential drugs or agreement on basic clinical guidelines, such as pain management.

Accountability and transparency towards patients (such as inadequate discharge notes, and procedures for complaints and redress), communities (hiring and firing of staff, location of facilities) and governments (supervision, adherence to local guidelines, when to begin/end programmes) are lacking at all levels.

**WHO’s approach to humanitarian emergencies**

Oleg Storozhenko presented the recently established WHO health in emergencies programme. The 2017 strategic priorities include:

1. robust and timeous risk assessment and responses to every significant new acute event (all-hazards);
2. strengthened partnerships for coordinated and predictable collective action;
3. number, quality and comprehensiveness of national prevention and preparedness action plans;
4. implementation of the country business model in grade-3 and high-risk countries with protracted emergencies that result in delivery of the response plan; and
5. high-priority disease-specific strategies and plans in place and applied in countries.

The programme has an all-hazards approach, working in conflict settings, infectious disease outbreaks and responding to chemical and nuclear disasters. Very strong coordination is needed, considering the number of organizations in the field. A cluster approach is taken to emergency responses, whereby each agency is responsible for a different cluster. The current estimated workload is the population living in conflict-affected areas and internally displaced people.

WHO is currently providing responses in two countries, the Syrian Arab Republic and Ukraine, from the south of Turkey. There are approximately 4 million people in need in
Ukraine, while WHO is providing support to 8 million people in two regions of the Syrian Arab Republic. The main activities in emergencies include, but are not limited to, delivery and distribution of medicines and medical supplies. NCDs are also an important consideration in emergencies. In Ukraine, for example, there is insufficient mental health support, so WHO is implementing the mhGAP intervention training there and in the Syrian Arab Republic.

Several challenges exist in relation to accessing essential trauma care and general health services, including lack of outpatient services due to insufficient trained or qualified health personnel and availability of quality health services, problems with patient referral systems, and lack of training opportunities. To address the last item, WHO is providing specific training to traumatologists.

Disease outbreaks may easily be missed and not reported timeously.

A system is in place in Ukraine but is not functioning adequately. WHO has set up an alert system to respond to this challenge.

**UNICEF guidance on child health in emergencies**

Ruslan Malyuta described how UNICEF is working mainly around two focus areas in the European Region: disaster risk-reduction related to preparedness and resilience of communities, and response to disasters. If a disaster happens, UNICEF is capable of responding within 48 hours.

UNICEF is a member of the health subcluster, led by WHO. There is a division of tasks within this subcluster: in Ukraine, it is mainly about ensuring adequate sanitation (water supply, distribution of sanitation kits). UNICEF also supplies vaccines and equipment. Prevention of diarrhoeal diseases is important, hence the focus on sanitation.

Frontline workers in the Region have been trained in IMCI, and feedback has been very positive.

Coordination is essential in emergencies, as planning and distribution procedures are particular to specific emergency contexts.

Migration is also an important issue in the Region. Even high-income countries often are unprepared to respond to emergencies by, for example, addressing and understanding the needs of unaccompanied minors. There is a lack of clear guidance on how to deal with children who have been affected by conflicts, many of whom have mental health-related symptoms. UNICEF often works with schoolteachers to address children’s trauma. In Greece, UNICEF developed a guide on how to carry out a rapid assessment of children in relation to mental health. It would be important to develop further guidance to demonstrate the role of primary health care providers, who largely are not involved in emergency responses. E-tools can become an important source of support.

**United Nations Population Fund guidance on adolescent health in emergencies**

Tamar Khomasuridye and Rune Brandrup presented the global United Nations Population Fund (UNFPA) strategy on adolescents and young people, which guides responses to sexual and reproductive health and participation during emergencies in the Region.
One of the critical pillars of the strategy is to reach out to the most vulnerable adolescents, which is particularly important during emergencies. The minimum initial service package is also used during emergencies, providing a set of activities and interventions for personnel to implement.

The UNFPA humanitarian strategy provides access to sexual and reproductive health to young people aged 14–19 and 20–24. The driver of the UNFPA response is to focus on adolescents’ and young people’s specific challenges, depending on where they are in the life cycle. Challenges include lack of basic information on sexual and reproductive health, disruption of health services or impossibility of access, risky behaviours, early sexual initiation, early and unwanted pregnancies, harmful practices (such as forced marriages), female genital mutilation and trafficking, substance abuse and boredom.

UNFPA has developed key documents to guide the agency’s response in humanitarian settings. Some of UNFPA’s key actions in humanitarian settings include providing safe spaces to enable adolescent girls to acquire life skills, psychosocial counselling for gender-based violence, access to sexual and reproductive information and referral to services, mobile clinics and outreach teams, and engagement and participation of adolescents and young people.

Discussion

It was suggested that it is important to assess the roles of different programmes during emergencies. During emergencies, assessment tools need to be harmonized, assessment missions must be coordinated, and expert agencies in adolescent health must work collaboratively. It is important to provide information to populations about services that are still in place, or what has to change in response to the emergency. Outreach activities are very important, as parts of the population will not seek care.

It is crucial to work on rules to guide the management of facilities that may lack amenities such as electricity. Intercountry planning and coordination plays an important role – in emergency situations, single countries’ capacities may be insufficient.

Conclusions

Susanne Carai presented the conclusions of the meeting and the way forward.

The way forward

The revisited child health approach will build on the results and lessons learnt from the regional and global IMCI reviews:

- while preventable deaths of children and adolescents must be averted, the strategy will aim to support all children and adolescents to reach their full potential;
- the strategy will be moving beyond age 5 and explicitly include adolescent health and well-being, according to the Convention on the Rights of the Child;
- the strategy will place children’s and adolescents’ needs and experiences at the centre of care and pay particular attention to child and adolescent participation and their right to adequate care;
- in the European Region, the strategy will in particular:
end non-evidence-based practices
- counteract inappropriate medicalization
- end unnecessary treatment and hospitalization; and

- health systems and community components will need to be strengthened, which will require adequate investment.

**Recommendations**

The recommendations from the meeting were to:

- define standards and competencies for primary care providers dealing with children and adolescents, including nurses, midwives, doctors (general practitioners and specialists) as single providers or multidisciplinary teams, as well as through the integration of referral pathways;

- develop a compilation of guidance in a user-friendly format for primary health care providers, such as a pocket book for primary health care providers that includes protocols, algorithms, a mobile application and linked training approaches, potentially interactive for patients;

- cover additional topics beyond the original IMCI guidelines, including:
  - mental health
  - early childhood development
  - TB
  - chronic conditions
  - newborn health
  - child maltreatment
  - adolescent health
  - over- and undernutrition
  - prevention and health promotion
  - guidance for care provision according to child rights
  - emergency care for children and adolescents;

- base this on existing evidence-based guidelines and tools;

- ensure the relevance of the guidelines to the European Region; and

- address the specificities of humanitarian emergencies review and develop standards, competencies and corresponding guidelines, protocols and tools for child and adolescent health in humanitarian emergencies.

**Implementation considerations**

- The follow-up of recommendations and proposed workplan should be linked to the declaration of 40 years of Alma-Ata in 2018.

- WHO with its partner organizations and agencies, particularly UNICEF and UNFPA, should ensure accountable processes:
  - efforts and investment for adapting and tailoring strategies and guidelines and related processes to country contexts within a longer-term plan; and
  - promotion and regional compilation of country reports on progress against targets, to which countries are committed.

- The revisited strategy should put a stronger focus on the health system component required to enable the implementation of, and adherence to, evidence-based practices and guidelines, including the national regulatory framework legislation,
policies and regulations, human resource planning, health information systems, financing mechanisms (inclusion of services in benefits packages for health insurance), quality improvement processes and an overall accountability system.

- WHO with its partner organizations should advocate for investment in pre-service training and continuous medical education, as well as evidence-based processes for the development of national guidelines.

- WHO with its partner organizations should partner with civil society organizations to ensure child and adolescent rights are met.

**Closing**

Wilson Were updated the group on the global process.

Three regional consultations have already taken place, with the consultation in the WHO African Region due to occur in the following week. The aim is to define priorities and considerations from the regions to contribute to a new global framework. WHO headquarters plans to host a global consultation among the regions in the first trimester of 2018.

The chair, Liz Molyneux, expressed her gratitude for being allowed not only to participate in the meeting with such an enthusiastic, committed and knowledgeable group, but also for being invited to act as chair. She concluded that it is clear that the child health agenda needs to broaden well beyond curative medicine and be expanded along the life-course, including children over 5 years and adolescents. It needs to be grounded in a rights-based approach and be as inclusive and integrated as possible.

Martin Weber thanked participants for their valuable contributions to the regional discussion in the context of the ongoing global process and closed the meeting.
Annex 1. Programme

Objectives of the meeting

- To get regional feedback on the IM(N)CI child health strategic review and the WHO Regional office for Europe IMCI review with a focus on the recommendation on redesign of child health guidelines and guidance materials.
- To consider different child health areas towards the redesign of child health guidelines and guidance materials.
- To provide recommendations on the way forward for WHO guidelines for children and adolescents in Europe.

Chair: Elizabeth Molyneux

<table>
<thead>
<tr>
<th>Day 1 - 31 October 2017</th>
<th>09:00–09:30</th>
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<tbody>
<tr>
<td>Opening session</td>
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<td>09:00–09:30</td>
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<tr>
<td>Opening and welcome</td>
<td>Gauden Galea</td>
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<tr>
<td>Objectives, expected outcomes and review of agenda</td>
<td>Aigul Kuttumuratova</td>
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<td>Introduction of participants</td>
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<td>Administrative announcements</td>
<td>Olga Pettersson</td>
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Session 1. The global and regional IM(N)CI reviews

Objective: to provide regional feedback on the IM(N)CI child health strategic review and the IMCI review with a focus on the recommendation on redesign of child health guidelines and guidance materials

<table>
<thead>
<tr>
<th>09:30–10:30</th>
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<tbody>
<tr>
<td>Findings of the WHO IM(N)CI strategic review (15 min)</td>
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<td>Findings of the WHO IMCI review (20 min)</td>
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<td>Child health redesign in the context of the SDGs (proposed framework) and discussion (25 min)</td>
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<tr>
<td>Discussion of and reflections on the findings of the reviews</td>
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<tr>
<td>Adolescent-friendly health services (AFHS) in Europe - findings of a review (20 min)</td>
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<td>An overview of school health services (SHS) in Europe (20 min)</td>
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<tr>
<td>Discussion AFHS and SHS</td>
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<td>Mortality and morbidity burden in the European Region (20 min)</td>
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<td>Introduction to group work (5 min)</td>
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<th>13:30–14:30</th>
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<tr>
<td>Group work on findings of the reviews and the limitations of the approaches in the European Region in relation to: 1. preventive, promotive, counselling practices 2. curative practices 3. health systems approaches</td>
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Day 1 - 31 October 2017 (contd.)

14:30–15:30 Feedback from group work and plenary discussion: Did the IMCI and AFHS guidelines serve the Region and how can they be improved? Chair

Session 2. Considerations for the way forward – contexts of care provision for children and adolescents

Objective: To identify the competencies required for context specific care provision to children and adolescents

16:00–17:30

1. Models of Child Health Appraised (MOCHA)
   What do we know about models and quality of primary healthcare for children and adolescents in European countries?
   5 min introductory statements from Panel members: 1. Mitch Blair 2. Bettina Schwedhelm 3. Elizabeth Molyneux 4. Sergey Sargsyan 5. GalinaPerfilieva followed by comments and reflections by other panel members and audience
   Moderator: Ana Guerreiro

2. Home visits
   What should home visits entail and which competencies should the provider of home visits have?

3. Care for emergencies in children and adolescents
   Which competencies must community members, primary care providers and ambulance staff have?

4. Pathways of referral for children and adolescents who need further investigation or care
   Which competencies needs the primary provider and which services are provided within the health system?

5. Health workforce for care for child and adolescent health in Europe
   Is the workforce in Europe adequate and competent to meet child and adolescent health care needs and what is required for improving pre-service education?

17:30–17:45 Conclusion of day 1 Henrik Khachatryan

Day 2 - 1 November 2017

08:45–09:00 Recap of day 1 Henrik Khachatryan

Session 3. Child and adolescent health care – what is needed and how much is too much?

Objective: To discuss how much care is needed for children and adolescents and how much is too much

09:00–10:30

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Integrated primary care in Europe - Are children’s and adolescents’ needs met? (10 min)</td>
<td>Altynae Satylganova</td>
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<td>Screening examinations for children: The model of the Russian Federation (10 min)</td>
<td>Leyla Namazova</td>
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<td>Neurological conditions (10 min)</td>
<td>Colin Kennedy</td>
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<td>Primary paediatric care in Europe - the German model (10 min)</td>
<td>Gottfried Huss</td>
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<td>“Everybody wants a sick child” The rights approach to child health (10 min)</td>
<td>Ana Guerreiro</td>
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<td>3 min</td>
<td>3 min statement followed by discussion</td>
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<tr>
<td>10:30</td>
<td>How do WHO guidelines on antimicrobial resistance promote less use of antibiotics in children? Jane Robertson</td>
<td>Moderator: Aigul Kuttumuratova</td>
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10:30–10:45 Discussion of the morning
How does the list of essential medicines promote rational use of drugs?  Jane Robertson

Over-investigation, over-treatment and over-hospitalization of children.  Susanne Carai

Why do children still do not get the vaccines they need at the health facilities?  Liudmila Mosina

### Session 4. Considerations for the way forward – Technical content areas

**Objective:** Identification of additional technical content to be included in “re-visited IMCI” guidelines for care providers dealing with children and adolescents

**11:00–12:30**

- **Introduction to the session**  Susanne Carai
- **Early childhood development (5 slides + contestant statement)**  Ilgi Ertem + Olga Komarova
- **Child maltreatment (5 slides + contestant statement)**  Yongjie Yon + Elena Kesheshian
- **Chronic conditions (5 slides + contestant statement)**  Jill Farrington + Michael Rigby
- **Over- and undernutrition (5 slides + contestant statement)**  Jo Juwell + Reinhard Klinkott
- **Newborn care (5 slides + contestant statement)**  Mavjuda Babamuratova + Ralf Weigel
- **Tuberculosis (5 slides + contestant statement)**  Martin van den Boom + Olena Starets
- **Adolescent health (5 slides + contestant statement)**  Valentina Baltag + Marzia Lazzerini
- **Mental health (5 slides + contestant statement)**  Elena Shevkun + Jon Simon
- **Discussion**  Moderator: Susanne Carai

### Session 5. Changing professional practice

**Objective:** To discuss ways to improve professional practice and identify priorities for the European Region

**13:40–14:30**

- **The EuTEACH model of competencies for adolescent health (Pre- and in-service training) (10m)**  Pierre-Andre Michaud
- **The ETAT plus experience (10m)**  Mike English
- **A matrix model of child health based on different levels of competencies (10m)**  Martin Weber
- **Discussion**  Moderator: Chair

**14:30–17:00**

- **Group work**  3 groups discuss all questions
  1. What are the priorities for the European Region in relation to
**Day 2 - 1 November 2017 (contd.)**

a. Technical content  
b. Implementation and health system issues (incl. competent workforce)

2. What actions can be undertaken to address these priorities from within the Region and ensure implementation of the guidelines?

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<th>Time</th>
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<tr>
<td>17:00–17:30</td>
<td>Conclusion of day 2</td>
<td>Mekhri Shoismatuloeva</td>
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**Day 3 - 2 November 2017**

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<tr>
<td>08:45–09:00</td>
<td>Recap of day 2</td>
<td>Mekhri Shoismatuloeva</td>
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**Session 5 continued**

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<tr>
<td>09:00–10:00</td>
<td>Feedback from group work</td>
<td>Plenary Moderator: Chair</td>
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**Session 6. Child and adolescent health care needs in humanitarian emergencies**

**Objective:** To determine if additional guidelines are needed to address child and adolescent health care needs in humanitarian emergencies.

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<tr>
<td>10:00–11:00</td>
<td>What is different when providing care to children in humanitarian emergencies - a personal perspective (10 min)</td>
<td>Andreas Hansmann</td>
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**How are children’s and adolescents’ health care needs addressed?**

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<tr>
<td>10:00–11:00</td>
<td>WHO’s approach to humanitarian emergencies (10 min)</td>
<td>Oleg Storozhenko</td>
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<td>UNICEF guidance on Child health in emergencies (10 min)</td>
<td>Ruslan Malyuta</td>
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<td>UNFPA guidance on Adolescent health in emergencies (10 min)</td>
<td>Tamar Khomasuridze</td>
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<td>Discussion</td>
<td>Moderator: Chair</td>
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**Session 7. Recommendations and the way forward**

**Objective:** To provide recommendations on the way forward

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<tr>
<td>11:30–12:30</td>
<td>Discussion on the way forward</td>
<td>Martin Weber</td>
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<td>Closing</td>
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</table>
Annex 2. List of participants

**Dr Mitch Blair**
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**Dr Ilgi Ertem**
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Ankara  
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**Ms Ana Isabel Fernandes Guerreiro**
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**Dr Andreas Hansmann**
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**Dr Gottfried Huss**
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**Dr Marzia Lazzerini**
Unit for Health Services Research and International Health Instituto per l'Infanzia  
IRCCS Burlo Garofolo  
Trieste  
Italy

**Dr Colin Kennedy**
Professor of Neurology and Paediatrics, University of Southampton  
Hon Consultant in Paediatric Neurology, University...
Meeting on child health redesign in the WHO European Region

Hospital Southampton NHS Foundation Trust
Immediate Past President of the European Paediatric Neurology Society

**Dr Elena Keshishian**
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**Dr Reinhard Klinkott**
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**Dr Olga Komarova**
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**Dr Ruslan Malyta**  
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**Dr. Tamar Khomasuridze (by Skype)**  
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Istanbul  
Turkey

**World Health Organization**

**Headquarters**

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Dr Wilson Were  
Medical officer  
Department of Maternal, Newborn, Child and Adolescent Health

**Regional Office for Europe, country offices**

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WHO Country Office in Armenia

Dr Mekhri Shoismatuloeva  
National Professional Officer  
WHO Country Office in Tajikistan

**Regional Office for Europe**

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Division of Noncommunicable Diseases and Promoting Health through the Life-course

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Communicable Diseases and Health Security

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Human Resources for Health  
Division of Health Systems and Public Health

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Health Technologies and Pharmaceuticals  
Division of Health Systems and Public Health

Dr Dinesh Sethi  
Programme Manager  
Violence and Injury Prevention  
Division of Noncommunicable Diseases and Promoting Health through the Life-course
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Division/Programme</th>
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<tbody>
<tr>
<td>Dr Elena Shevkun</td>
<td>Technical Officer</td>
<td>Mental Health and Mental Disorders Division of Noncommunicable Diseases and Promoting Health through the Life-course</td>
</tr>
<tr>
<td>Dr Oleg Storozhenko</td>
<td>Technical Officer</td>
<td>Emergency Operations Division of Health Emergencies and Communicable Diseases</td>
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<tr>
<td>Dr Altyna Satylganova</td>
<td>Technical Officer</td>
<td>Primary Health Care Division of Health Systems and Public Health</td>
</tr>
<tr>
<td>Dr Martin van den Boom</td>
<td>Technical Officer</td>
<td>Joint Tuberculosis, HIV/AIDS &amp; Hepatitis Programme Division of Communicable Diseases and Health Security</td>
</tr>
<tr>
<td>Mr Yongjie Yon</td>
<td>Technical Officer</td>
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<td>Dr Aigul Kuttumuratova</td>
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<td>Dr Martin Weber</td>
<td>Programme Manager</td>
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<tr>
<td>Ms Sophia Backhaus</td>
<td>Intern</td>
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<tr>
<td>Ms Olga Pettersson</td>
<td>Programme assistant</td>
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The WHO Regional
Office for Europe

The World Health Organization (WHO) is a
specialized agency of the United Nations
created in 1948 with the primary responsibility
for international health matters and public
health. The WHO Regional Office for Europe
is one of six regional offices throughout the
world, each with its own programme geared
to the particular health conditions of the
countries it serves.

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Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
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Czechia
Denmark
Estonia
Finland
France
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