



## ICATT survey – five years after the launch

Country experiences, lessons learned and recommendations

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### Disclaimer

The views and ideas expressed herein are those of the author(s) and do not necessarily imply or reflect the opinion of the Swiss Tropical & Public Health Institute.

## Abbreviations

ICATT	Integrated Management of Childhood Illness Computerized Adaptation and Training Tool
IMCI	Integrated Management of Childhood Illness
IMPACTt	Integrated Management of Pregnancy and Childbirth Training Tool
MoH	Ministry of Health
NFSD	Novartis Foundation for Sustainable Development
NGO	Non-Governmental Organization
NPO	Non-profit Organization
UNICEF	United Nations Children's Fund
PH	Public Health
Swiss TPH	Swiss Tropical and Public Health Institute
ToT	Training of Trainers
WHO	World Health Organization

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## Executive Summary

Recognizing the importance and need to scale up training in IMCI (Integrated Management of Childhood Illness) globally, the Novartis Foundation for Sustainable Development has supported the World Health Organization since 2004 in the development of an eLearning tool ICATT (IMCI Computerized Adaptation and Training Tool) that allows the adaptation of the IMCI guidelines and the roll-out of the training itself.

The present survey aims to collect data about adaptation, dissemination, implementation and application activities of ICATT as well as identifying the achievement level of these activities within the health and education system, the benefits, challenges and potential influence in changing the health professionals' training landscape. This survey also proposes concrete measures to further disseminate and implement ICATT and will contribute to the strategy for the future dissemination of the IMPACtt software (Integrated Management of Pregnancy and Childbirth training tool).

Data collection was done by conducting semi-structured interviews with the survey participants. A total of 50 interviews were performed, to respondents of 21 different countries.

It was very difficult to collect accurate data about the different activities related with ICATT and to have a general overview of the level of these activities. Information collected show that there are successful experiences mainly depending on the enforcement and engagement of the country stakeholders and of proper planning and resources allocation.

Results show that in the majority of the country's that participated in WHO workshops, ICATT has not been adapted, disseminated and implemented within the teaching and training environment as would have been expected. Most countries were not able to develop and pursue their own strategy using ICATT within their teaching and training system. Beside the known prevalent limitations in resource constraint settings affecting any type of project using modern information & communication technologies, e.g. infrastructure conditions, computer literacy, language skills and financial support further constraints were highlighted by the interviewed. One challenge countries are confronted with is the strategic planning required when aiming to introduce ICATT on national level. The lack of guidance on how to go about it is often resulting in unfinished adaptation, some small scale pilot trainings and isolated institutional applications based on personal initiatives and interests. Strong leadership, commitment and enforcement on national level are the driving forces for a successful national implementation of ICATT as has been shown by the Fiji example. The set-up of a project team at national level involving all relevant stakeholders from the health and educational sector defining country objectives in terms of IMCI/ICATT would be the initial step required to launch such a far reaching intervention potentially changing the way how people are trained in the health sector.

In order to overcome the human resource and financial constraints countries need guidance in attracting local and international partners to support and participate jointly in required activities. National and regional WHO offices could play a vital role in bringing together national and international stakeholders like Ministries, potential funding organisations and project implementers (NGO/NPO) with a common interest in MCH/IMCI. ICATT dissemination workshops could then serve to define national strategies, form a joint project team, define objectives, assign responsibilities, elaborate work plans and budgets and establish a monitoring framework.

# 1 Survey Background

## 1.1 Introduction

Integrated Management of Childhood Illness (IMCI), developed by WHO and UNICEF in the 1990s, is one of the cornerstones of the drive to reach Millennium Development Goal 4. IMCI is a relatively easy question-answer approach that facilitates diagnosis and treatment for health workers by focusing on the child as a whole. To date, more than 100 countries have adopted IMCI as a strategy to improve child and infant health. The introduction of IMCI at country level, however, requires a great deal of coordination among existing health programs and services. Main challenges include the adaptation of national IMCI guidelines on a regular basis as well as training and retraining of a sufficient number of staff in IMCI.

In order to tackle these challenges, the Novartis Foundation for Sustainable Development has supported the World Health Organization since 2004 in the development of an eLearning Tool called ICATT. ICATT (IMCI Computerized Adaptation and Training Tool) on the one hand facilitates the adaptation of IMCI guidelines to meet country-specific requirements and on the other hand helps scale up IMCI training. The generic ICATT version is a starting point for creating national and local IMCI training courses according to the relevant categories of health staff. The content can be adapted at ministry level through the easy-to-manage ICATT interface and languages, written text and audio-visuals can be changed and additional content integrated. The IMCI chart booklet, which contains the diagnosis and treatment algorithm, can also be adapted through the interface.

Since 2008 WHO is conducting workshops at regional, sub-regional and national level aiming at disseminating and promoting the integration of ICATT into countries IMCI training activities. WHO estimates that to date around 12 countries have completed IMCI (Integrated Management of Childhood Illness) adaptation through ICATT. WHO is currently further disseminating the software at global level through workshops at regional and country level.

There exists limited data about the dissemination, concrete use and potential impact of ICATT in the field. Novartis Foundation commissioned the Swiss Tropical and Public Health Institute to conduct a survey to gather data about the current status of ICATT dissemination and the experiences and lessons learned by the countries participating in the WHO workshops.

## 1.2 Survey Objectives

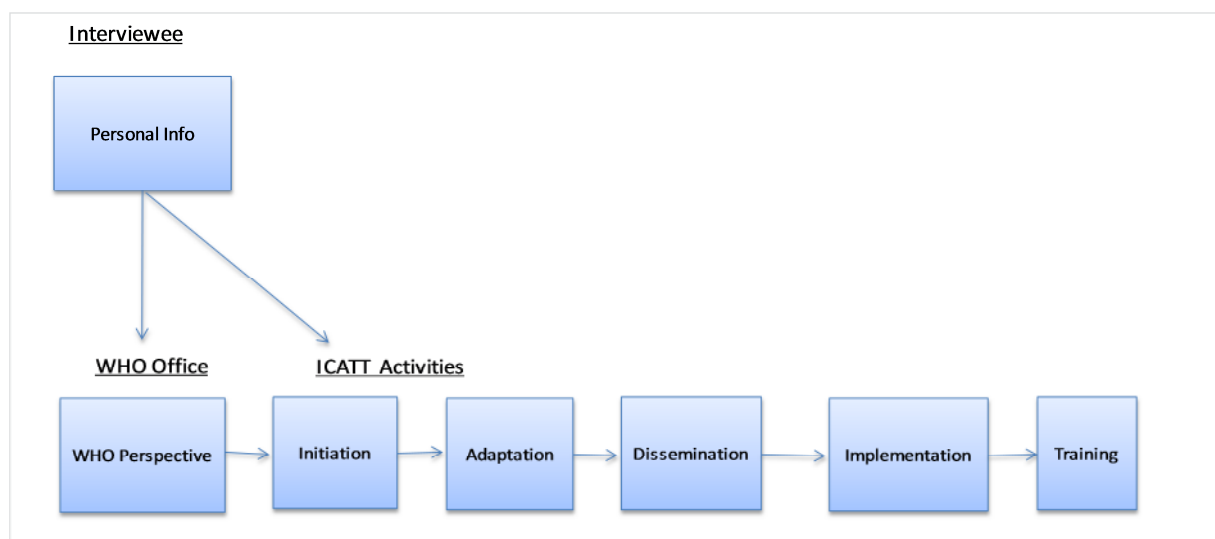
The objective of the survey is to get an overview about the geographical and institutional distribution of ICATT, collecting data about the level of dissemination and type of application of ICATT as well as identifying the level of implementation within the health and education system and its reach and potential influence in changing the health professionals' training systems.

The survey shall identify concrete measures to further disseminate ICATT as well as help inform the strategy for the future dissemination of the IMPAC*tt* software (Integrated Management of Pregnancy and Childbirth training tool).

## 2 Material and Method

### Data Collection

The survey consisted of semi-structured interviews using an interview guide developed by the Swiss TPH in collaboration with Novartis Foundation to ensure that all topics of interest were covered. Mostly qualitative and some quantitative data was collected. The interview guide addresses questions relevant for the successful implementation of ICATT at country level covering the entire process from ICATT adaptation down to the introduction and use of ICATT at teaching and training institution level. The different domains of the interview guide are shown in *Figure 1: Interview Structure and Workflow* below.



*Figure 1: Interview Structure and Workflow*

**Personal Info:** The interview was started with questions related to the personal background of the interviewee allowing putting the answers regarding ICATT activities into context.

**WHO Perspective:** The questions in this domain were directed to interviewees that represented WHO and the objective was to get their feedback about the ICATT tool its usage countrywide.

**Initiation:** These questions were related to the status of IMCI in the country, key stakeholders involved in IMCI and also to collect information about the first contact of the interviewee's with the ICATT tool.

**Adaptation:** In this domain the interview questions focused on several aspects related with Adaptation activities of ICATT tool e.g., people involved, time frame, supporting factors, challenges and future needs.

**Dissemination:** The questions concerning dissemination activities intended to gather information about the initiatives in the country done to introduce and promote the usage of ICATT tool in the country.

**Implementation:** The intention of this domain was to collect information about the level of implementation of ICATT in the country's teaching and training landscape.

**Training:** These questions aimed at collecting data about actual usage of ICATT within training institutions and their experience with the tool.



## Semi-Structured Interview

Semi-structured interviews were conducted between January and April of 2014.

Interviews were conducted in French or English language, depending on the respondent's country, using a semi-structured format with open-ended questions which gave respondents the freedom to share their experience and issues and enabled the interviewer to probe further in a flexible manner. Numerous invitation emails were sent (max. 4 reminders to each contact) to encourage participation.

A detailed listing of guiding questions can be found in **Annex 2**.

## Data Type and Analysis Method

Qualitative and quantitative data from interviews were summarized and compiled in excel tables that allowed the analysis of data per country and individual domains: WHO Perspective, Initiation, Adaptation, Dissemination, Implementation and Training. The method used to analyse interview data include typology and constant comparison.

## 2.1 Sampling

Primary source of contact information was WHO Headquarters as well as Regional and Sub-Regional Offices. Secondary source of contact information were Novartis Foundation, Swiss TPH and the ICATT web-site at [www.icatt-training.org](http://www.icatt-training.org).

WHO organised and conducted numerous workshops promoting ICATT and introducing national stakeholders to the use and benefits of it, see *Table 1: WHO workshops conducted* below.

Date	Place	Countries involved
August 2009	Pacific Region	Fiji, Micronesia, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu
December 2010	Geneva, Switzerland	Czech Republic, Burkina Faso, Nigeria, South Africa, Switzerland, Mongolia, Zimbabwe, Egypt, India, Congo, Armenia, Bangladesh, Philippines, Colombia,
June, 2011	Liwonde, Malawi	Kenya, Zimbabwe, Malawi, Uganda, Ghana, Nigeria, Tanzania, Ethiopia, Zambia, Mozambique
September 2011	India, New Delhi	Bangladesh, India, Nepal
October 2011	Ségou, Mali	Burkina Faso, Cameroon, Mali, Senegal, Niger, Gabon, Switzerland, Czech Republic
June 2012	Jinja, Uganda	Uganda, Ethiopia, Eritrea, Kenya, Lesotho, Malawi, Swaziland, Tanzania, Zambia, Zimbabwe
August 2013	Nakuru, Kenya	Kenya, Malawi, Uganda, Zambia, South Africa, Zimbabwe, Tanzania, Ethiopia, Mozambique

*Table 1: WHO workshops conducted*

Follow-up workshops initiated by national stakeholders took place independent from WHO in some countries, see *Table 2: National workshops conducted* below.

<b>Date</b>	<b>Place</b>
2009	Laos
2009-2010	Philippines
2010	Fiji
2010-2013	Tanzania
2011-2012	Ghana
2011-2013	Malawi
2012	Niger
2012	Burkina Faso
2012-2013	Zambia
2013	South Africa

*Table 2: National workshops conducted*

The invited participants to the above workshops served as an initial sample who was contacted to be interviewed in a telephone survey. Potential candidates were contacted by email asking for their interest and willingness to participate in the survey. Those replying positively were contacted to agree on the mean of communication (Skype or phone) and the date. Snowball sampling was used identifying further persons involved into IMCI/ICATT who could be interviewed to generate more accurate or additional country specific information.

### 3 Results

#### 3.1 Interviewed Sample

The lists provided by WHO contained workshop participants from 42 different countries.

The invitation for participation in the survey was sent to contacts from 35 different countries. Contacts from 21 countries have responded to the interview invitation. The detailed list of countries can be found in **Annex 3**.

Not all countries from the final list with available contacts were included into the survey. Seven countries were put “On Hold” due to the time zone differences and the related problems with performing the interviews.

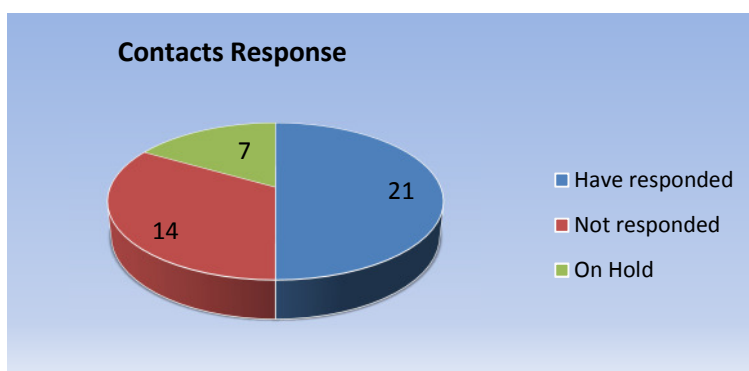


Figure 2: Contacts Response (no. of countries)

194 contacts were invited to participate in the survey, 119 (61.3%) did not answer, 25 (13%) agreed to participate but did not show up for the interview or claimed not to have valuable information to share. Out of 194 contacts, 50 (25.7%) persons have been successfully interviewed. 144 (74,3%) contacts were not interviewed. The distribution of interviewees according to WHO Region can be found in *Table 3: Interviews per Region* More detailed information about interviews performed by country can be found in **Annex 3**.

WHO Regions	Total no. of interviews
Africa	38
Europe	2
Pacific	6
South East Asia	4

Table 3: Interviews per Region

The respondents have different professional backgrounds, the majority of them being Medical Doctors (32), followed by Nurses (9), Medical Officers (4), Midwife’s (2) and Public Health Specialists (2) and Clinical Officers (1).

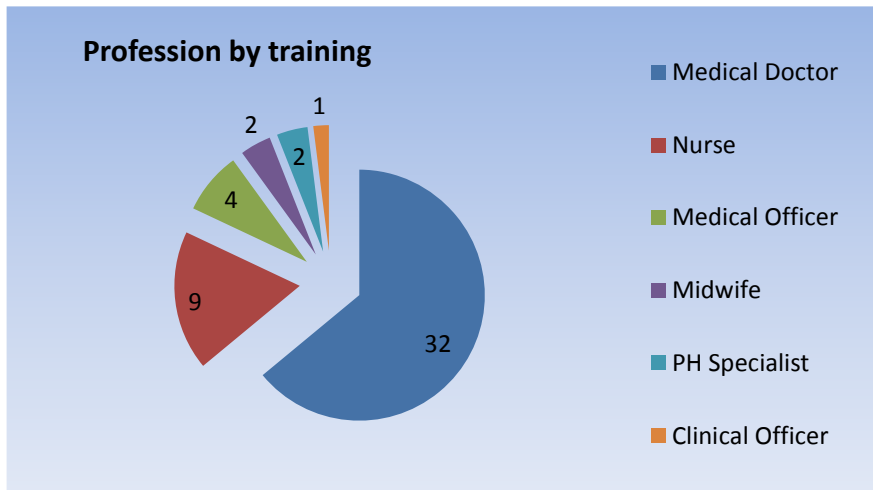


Figure 3: Profession by training

The interviewees profession by training not always correspond to the current functions that they perform, the majority of them currently work as IMCI Experts, Tutors or Lecturers (19), 11 of the respondents are Medical Doctors and National Program Officers at WHO Country or Regional Offices, 10 of the interviewees are involved in Child Health Management or are IMCI Coordinators, 5 have Managing/Directorship functions in Educational/Training Institutions, 3 are ICATT Project Managers and 2 are Consultants in a NGO.

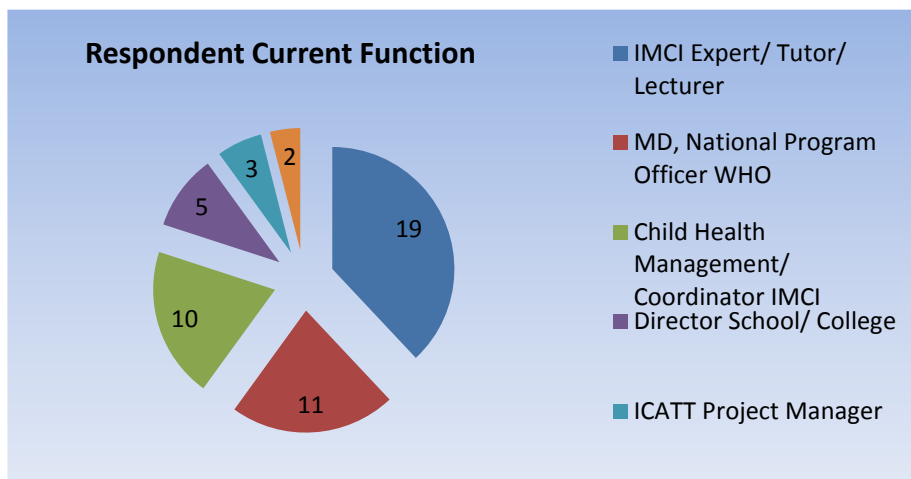


Figure 4: Respondents Current Functions

The interviewees work for different types of organizations: 22% of respondents are WHO representatives and 22% are affiliated with the Government. The majority (46%) is attached to an educational/training institution. Few respondents work in health facilities (4%) or NGOs (6%).

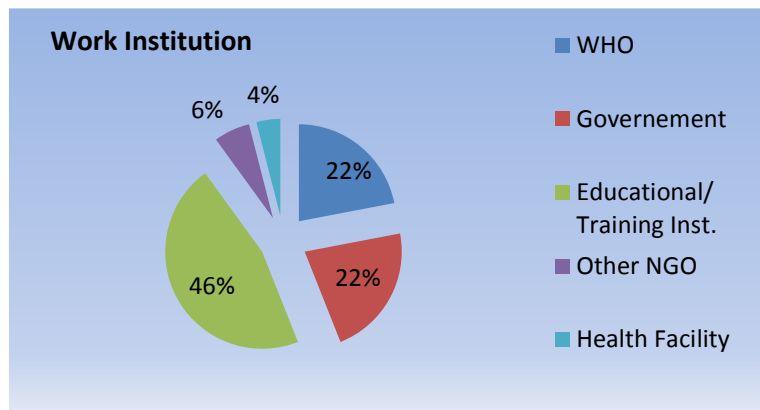


Figure 5: Work Institution

72% of the interviewees are based in the capital of the country and 28% are based outside the capital.

### 3.2 ICATT Activities

#### IMCI Status & Initiation

From the interviews feedback, IMCI is implemented in 71,4% of the countries covered by the survey; IMCI implementation is on-going in 23,8% of the countries analysed and only in 4,8 % IMCI is not implemented, as it can be seen from the figure below, *Figure 6: IMCI status in countries.*

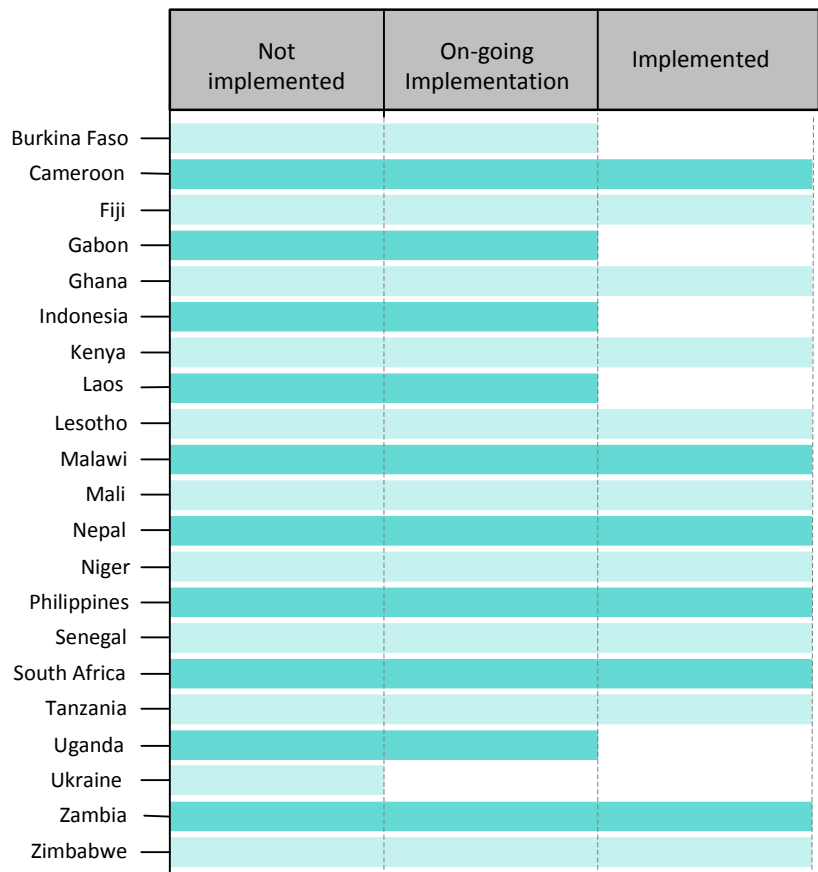


Figure 6: IMCI status in countries

32 of the 50 contacts interviewed knew about ICATT tool through WHO workshops, the other 18 interviewees' learned about ICATT through other organizations, networks existing in the country and personal contacts.

**Adaptation**

13 out of 21 countries did the adaptation of ICATT tool, 10 with external support (foreign development projects, partners in the country, etc.) and 3 with own resources. Out of the remaining 8 countries 3 did only start the adaptation but did not finish due to lack of response from the Government, lack of funding and human resources.

The 5 countries which did not start the adaptation were lacking financial resources (2), response from the Government (3), interest (1) and were still working on IMCI guidelines country adaptation (1).

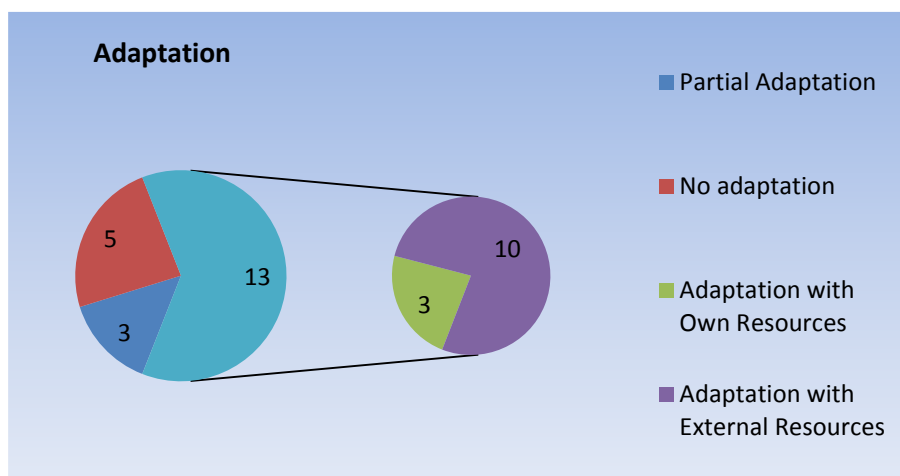


Figure 7: Adaptation Activities

**Dissemination**

10 out of 21 countries have done dissemination activities regarding the ICATT tool, Training of Trainers (9), Pilot Trainings (4) and distribution of DVD's with ICATT Software(3).

The dissemination activities using Pilot trainings had the goal of testing the adapted version of the tool and evaluating ICATT as a teaching method in order to support further implementation/training activities

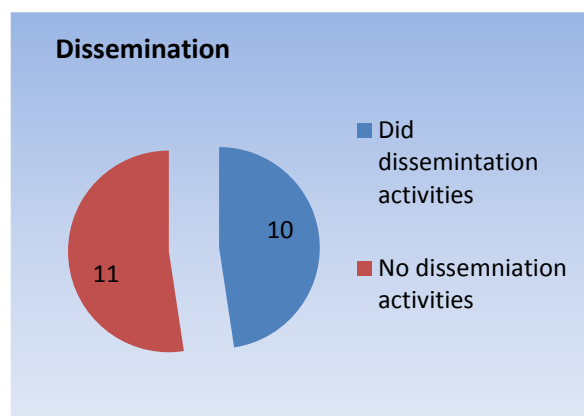


Figure 8: Dissemination Activities

11 countries didn't do any dissemination activity, 5 of them because ICATT adaptation didn't start yet, and the other 6 referred as reasons Governmental restructuring (2), lack of resources (2) and the on-going comparative survey of ICATT vs. classical IMCI training that will allow to plan dissemination activities(3).

Four out of eleven countries that didn't start dissemination activities referred that there were tentative plans to initiate these activities in 2014.

### Implementation and Training

12 out of 21 countries did trainings using ICATT tool, 6 just did pilot trainings and 6 have implemented and have currently regular trainings happening in Educational/Training institutions using the ICATT Software. From the 6 countries that reported implementation and regular training activities, only one performed these activities and implemented ICATT teaching method at National Level (Fiji), the other five implementations are done at local institution level.

9 countries didn't do any implementation or training activities using ICATT because other activities such as adaptation and dissemination of ICATT tool were not complete or didn't happen.

From the countries that have ICATT implemented in the training institutions, all 6 provide pre-service training and 3 of them also provide in-service training.

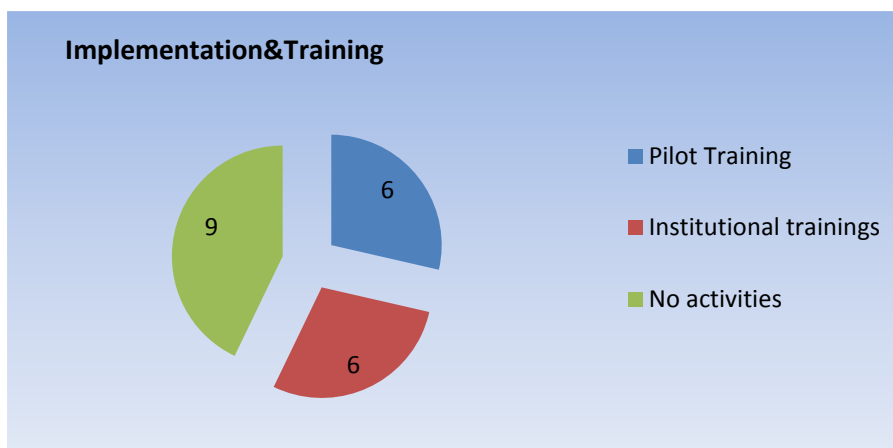


Figure 9: Implementation&Training Activities

The figure below provides an overview of the progress of the Adaptation, Dissemination and Implementation/Training ICATT activities in the countries interviewed. More detailed information per country can be found in **Annex 3**.

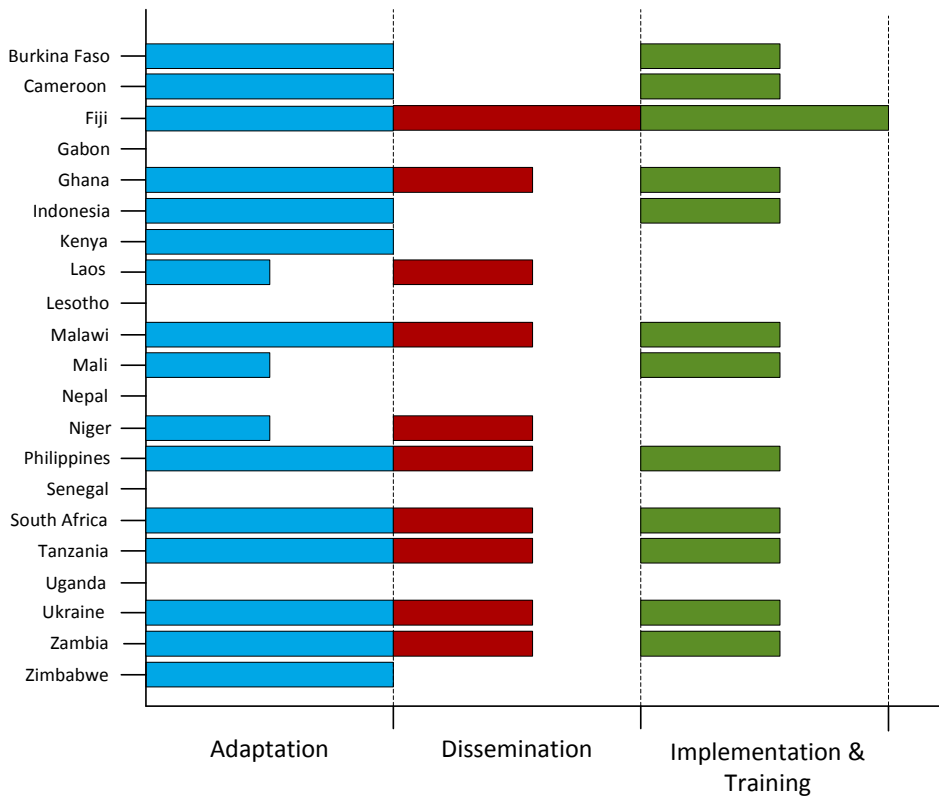


Figure 10: ICATT activities progress

Regarding adaptation activities, the half bars represent the countries that did partial adaptation of the ICATT Tool. In terms of dissemination, the half progress bar includes the countries that did dissemination activities but these were not carried out at National Level. The same interpretation applies regarding the Implementation & Training activities.

### 3.3 Benefits

The main benefits of ICATT implementation referred to during the interviews were:

- ICATT is less expensive when compared with the classical IMCI training. This was the information given by respondents from Philippines, Fiji, Tanzania and Cameroon based on field studies and pilot trainings done in the countries that allowed comparing the costs of both methodologies;
- Training using ICATT can be faster than the IMCI classical approach;
- Simplifies Teaching, Evaluation and Training Coordination, making Tutors life easier;
- Increase in training capacity of institutions;
- Users having the resources available in the tool, Library and Tutorials; this is also referred as a supporting factor for the tool usage;

### 3.4 Challenges

The main challenges referred to by the interviewee's include:

- Infrastructure conditions, like e.g. power supply, internet connection and lack of computers available;
- Computer literacy, not all health workers and students have the sufficient computer skills;
- Limitations in Human Resources in terms of available facilitators;
- Technical and Financial Support;



- Time constraints regarding availability of stakeholders for meetings and bringing everyone together;
- Limitations in follow up and assessment of trainees, these limitations are tightly related with the lack of Human Resources above mentioned;

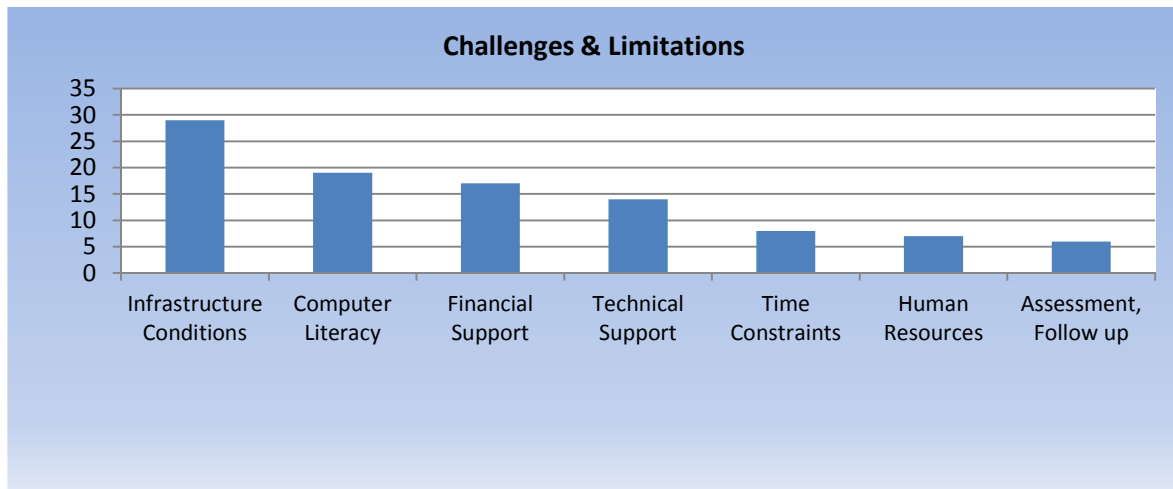


Figure 11: Challenges and Limitations

Other challenges also mentioned by respondents are related with language/communication limitations, clear and defined leadership in activities, country size and fragmentation, motivation to adopt a new teaching methodology, Government support, IMCI level of dissemination in the countries and even medical skills of health workers.

### 3.5 Supporting Factors

The main supporting factors for ICATT implementation referred to during the interviews were:

- Simplicity and user friendliness of the ICATT tool and the attractive methodology using pictures and videos demonstrations;
- Financial and technical support from stakeholders in the country;
- Support from other Partners in the country, e.g. NGO's;
- Resources availability in the tool (Library and Tutorials);
- The flexibility of the ICATT tool in terms of time, people can learn on their own pace;
- The enthusiasm of people when using the tool;
- The fact that students are more open-minded and skilled when using computers;

### 3.6 Recommendations

Recommendations given by the interviewee's can be grouped in 4 main categories:

1. ICATT Tool developments
2. Communication
3. Strategy and Planning
4. Implementation/Training

Regarding the ICATT tool developments, several recommendations and suggestions were made, one of them was to make this application work in Tablets or smartphones, for several Operating Systems, since the use of this technology is increasing and this would make ICATT more portable. Another recommendation made was to update and add more visual components, pictures and videos, especially country related (African patients, Asian patients, etc.). Another suggestion in terms of development of the tool was to be able to produce a Lecture Mode in ICATT since in many countries, due to the lack of computers, the teachers have to use projection when doing the training. To be able to produce specific presentations oriented to the different types of training would be a big help in these countries.

In terms of Communication the recommendations made are related with either the inexistence or awareness of defined support and communication channels, so that users have a supporting system that allows them to get immediate answers to their questions. It was also referred that the user guides should be more user-friendly and need development. The lack of material in French language was also pointed out.

The recommendations concerning Strategy and Planning made by the interviewees relate with a supporting/guidance document in developing the implementation strategy of the ICATT tool in the country. This document would include, e.g. detailed description of activities, leading institutions, time plan, financial plan, milestones, among others.

For the implementation and training using ICATT the main recommendations from the interviewee's are to implementing the ICATT tool within educational organizations for pre-service training and to include this methodology in the training curricula at national level, since students are normally more open minded and skilled in handling computers and in most cases Schools and Universities have computers. Another suggestion was to use ICATT facilitators of these training institutions for the dissemination activities, they know ICATT and how to work with it and already have experiences when using and training people and this should be shared with others.

### 3.7 WHO Perspective

From a total of 38 contacts of WHO representatives, 11 participated in the survey (28.9%). For more detailed information, please consult **Annex 3**.

All of the interviewees' attended workshops about the ICATT Tool, some of them as Facilitators, to present the tool features and country experiences with ICATT, and others as participants to learn about ICATT tool and its functionalities.

The interviewees' feedback about the ICATT Tool is overall positive. ICATT is considered a very user-friendly tool (3), educative (3) and flexible (2). Respondents recognize its potential and usage to scale up IMCI trainings in different environments, for pre-service and in-service training, distance learning and as resource for teaching material.

From the respondents' perspective, there are several advantages in provide training using ICATT when comparing with the classical IMCI 11 days training approach:

- The possibility of doing the training at their own pace/time flexibility(3);
- All materials/resources available (3);
- Less expenses with training(1);
- Less human resources needed to provide/organize trainings (2);
- Standardization of teaching materials (1);

Although 100% of the interviewees' indicate that there is space for the ICATT Tool to grow in the country, several challenges and limitations were identified: lack of human resources (2), funding (4), infrastructure in terms of reliable internet connection, power supply (2), availability of computers (2) and computer literacy(1).

## 4 Discussion

It is very difficult to have an overview of the different ICATT activities in a country and their progress level. Reasons for these, besides low response rates to the invitation to participate in the survey, are also related with the possibility that ICATT can be adopted individually and rolled out independently. This makes it difficult to obtain accurate information about ICATT activities level within a country.

Other survey limitations detected include:

- The date of the workshops and participants lists provided by WHO vary between 2008 and 2013 and there's a high probability that some of the contacts have changed their work positions and contact details;
- For some countries only one respondent to the survey was available. Information is limited and can be biased;
- Although objectives of the study were explained in the invitation for the survey and at the moment of the interview, some participants felt they were being evaluated;
- Language limitation, some contacts hesitated to be interviewed because they were not comfortable in speaking English;

Although the workshops organized by WHO included key stakeholders of each country, in many of them ICATT activities didn't developed so smoothly as expected or didn't develop to the point one would expect. In some countries, as seen in the chapter above, ICATT activities were inexistent after a WHO workshop and reasons referred for this were lack of communication and no follow-up from the key stakeholders, inexistence of a supporting plan and allocation of clear responsibilities as well as lack of financial resources.

Some of the statements related to the WHO workshops mentioning that the content of the workshop was not always suitable for the audience. Lack of information on strategy and planning activities concerning ICATT implementation was highlighted as a key issue. One approach to overcome this issue would be to differentiate workshop content by audience profile. One workshop could focus more on planning for people with managerial responsibilities and another could focus more on the features of the tool and how to use it targeting people who are concerned with or involved in teaching. Further providing appropriate materials/documentation that can support and guide key stakeholders through the planning of these activities.

In general it was acknowledged by the countries stakeholders that adaptation activities have to be pursued on national level. Country experience shows that ICATT adaptation can be completed in a relatively short period of time, however due to the lack of commitment and lack of human and financial resources, stakeholder's response remained weak and a considerable number of countries did not manage to finalise adaptation. Success factors are organizational capacities and commitment of the stakeholders responsible for IMCI content and its adaptation to national guidelines. Stringent monitoring and supportive supervision of the organisations in charge to adapt IMCI/ICATT by government stakeholders could be a measure to drive activities ahead. Providing countries with information about partners that could potentially support their initiative could help to overcome the above mentioned constraints and reinforce adaptation activities.

Dissemination activities are successful if a strategic plan exists which involves all stakeholders. The main target is capacity building, e.g. training of trainers and training of facilitators. This activity has been valued as a great experience but in some countries it was a onetime event and considered not sufficient for a proper scale-up of ICATT within the

country. Lack of leadership, lack of planning and financial resources and lack of human resources were mentioned as the biggest challenges hampering dissemination of ICATT. A possible solution to overcome at least the human resource constraints could be to focus on training/building a team of several trainers that could travel to the different regions and, besides providing ToT's, also do follow up on trainees and support them in the first steps of the implementation of the ICATT tool. With proper planning and human resources allocated specifically for these purposes it would be more likely to have consistent dissemination coverage throughout the country and accurate data and information that can help and contribute for further activities planning. Engaging zonal or regional training centres to further scale up ICATT to reach individual training institutions through dissemination measures could be another approach depending on the existing structure within a country.

The majority of institutions that use ICATT as a training methodology have implemented the tool as their own initiative, at local level. They are mainly relying on their own basic infrastructure and resources available within their institutions, e.g. facilitators/tutors, computer facilities and IT support staff. It is difficult to obtain an accurate overview of the level of implementation and the type of training activities using ICATT from these independent initiatives as they develop often unnoticed. The only successful implementation of ICATT on national level was reported from Fiji.

### **Fiji, a success story**

ICATT is used in Fiji at national level as a teaching methodology for pre and in-service training since 2010. Financial and technical support is provided by the IMCI key stakeholders in the country, Paediatric Clinical Service Network, Ministry of Health and several Partners. These stakeholders have been involved and have provided support throughout every activity related with ICATT, namely adaptation, dissemination, implementation and training and this is considered to be the key factor of ICATT success, showing that activities are useless if there's no commitment and reinforcement by key institutions/stakeholders in the countries and activities aren't closely followed up.

Pre-service training is considered to be the most recommended and viable environment to start using ICATT as a teaching tool, since students are more open minded when it comes to use technology and also more skilled in this sense.

ICATT has proven to increase the training capacity of institutions, and to reduce the costs of training, when compared with the classical IMCI training. Since ICATT is currently well implemented and used in the country, the focus is now on monitoring and evaluation activities and to establish processes of continuous education for health professionals in IMCI. More detailed information about the Fiji experience can be found in **Annex 4**.

Concluding the above the main recommendation for the introduction of ICATT in the countries would probably be to apply a more systematic approach in order that limitations like the lack of planning, strategy and follow up can be tackled. The dissemination strategy should not be based only on providing workshops to local stakeholders but to identify within the country the important actors for such a project, like implementers of MCH/IMICI projects, funding agencies and organisations, local stakeholders in the field (NGO/NPO), and bring them together to analyse the current situation, define objectives and elaborate a strategic plan. In this sense, the WHO strategy for disseminating ICATT within the countries could put the focus on bringing national stakeholders and partner institutions together creating an enabling environment and leading the strategic development and planning for the implementation of ICATT within the country and to serve as a reference point providing supportive support and monitor implementation progress.

## 5 Annexes

### 5.1 Annex 1: ICATT Tool

ICATT is an **innovative** software application to support the implementation of the WHO/UNICEF strategy on the Integrated Management of Childhood Illness (IMCI). The tool provides the possibility to adapt WHO generic IMCI guidelines at national and sub-national levels, and to develop ICATT-based training courses that fit into various training approaches.

Reflecting the dual purpose of the tool, the application has two main interfaces:

- The ICATT Builder and Manager (Open Interface);
- The ICATT Training Player (Closed Interface);

The ICATT Builder and Manager, also called Open Interface is intended for use by the experts at the global, national and sub-national levels. This interface allows the technical content and language of the guidelines to be revised, library and educational materials to be added, and a tailor-made training course to be created. The interface is user-friendly and does not require special computer skills.

The ICATT Builder and Manager contain the following components, which are all easily adaptable to local needs and requirements:

- The Chart booklet builder tool permits easy revision of the chart booklet according to the national or sub-national guidelines.
- The Library is a rich collection of key technical documents as well as video, audio materials, pictures and flash movies to be used for training. The tool allows other materials to be added and/or modified.
- The Training set contains the generic training materials (modules and training units) and exercises designed to be used either for teaching purposes or for individual or group learning and skills development. In addition, there is a set of various facilitator guides to help run different training activities: classroom teaching and clinical practice.

The ICATT Training Player, also called Closed Interface, contains the training materials which have been modified during the adaptation process in the ICATT Builder and Manager (open interface). It can be used in many ways, for self-learning, classroom teaching, distance learning, etc.

## 5.2 Annex 2: Interview Structure and Themes/Questions

### Interview Themes/Questions

#### Personal Information

1. Country/Region
2. Name of the interviewee
3. Profession by training
4. Name of the institution where respondent is currently working
5. Role/position in the Institution.

*Table 4: Personal Information questions*

#### WHO Perspective

6. Feedback about ICATT workshop. What were the objectives?
7. Feedback about ICATT tool
8. Feedback about ICATT tool usage countrywide. Is there space for this to grow and be used?
9. Feedback about ICATT tool approach compared with IMCI Classical Training

*Table 5: WHO Perspective questions*

#### Initiation

10. State of IMCI in country?
11. Key stakeholders for IMCI in the country
12. IMCI Coverage (%)
13. Follow-up done?
14. Who is responsible for IMCI update?
15. How were you informed about the existence of ICATT? By whom?
16. First contact with ICATT? Month/Year?
17. Respondent involved in any activities related to ICATT and what was his role?
18. Where you invited to attend a workshop and what was the purpose? If not invited or didn't want to go, why?
19. Objectives of using ICATT?
20. Is ICATT currently used in the Country/Institution?

*Table 6: ICATT initiation questions*

#### Adaptation

21. Name of Institutions responsible for ICATT content adaptation

22. Location of these Institutions
23. How is the adaptation of content organised?
24. How often does it take place?
25. How many people involved in the content adaptation activities and their background/Professional group?
26. When was this adaptation of the tool made?
27. How long did it take?
28. Was there any country/regional or Institutional investment?
29. If yes, what was the amount of the budget? (per diems, other costs)
30. Costs compared with IMCI classical approach?
31. Was the objective (in this case, adaptation of ICATT) achieved?
32. Is the Institution still responsible of adapting ICATT? If no, why and who then?
33. Were there any factors that made adaptation of ICATT difficult?
34. Were there any factors that facilitated adaptation of ICATT or can accelerate these? Recommendations
35. How do you ensure adaptation/quality of the tool? Is there any process written, any strategy?
36. Do you see future developments needs to further improve adaptation functionality?

*Table 7: ICATT Adaptation questions*

## **Dissemination**

37. Dissemination Level?
38. Name of Institutions responsible for ICATT dissemination
39. Location of these Institutions
40. How many people involved in the dissemination activities and their background/Professional group?
41. ICATT Software distributed?
42. How many, where, to whom?
43. What activities were done to disseminate ICATT?
44. Location of activities?
45. How many sessions?
46. How long did it take?
47. How many Institutions informed or reached? Or how many people attended the activities?
48. When did the dissemination activities took place?
49. For how long?
50. Was there any country/regional or Institutional investment?
51. If yes, what was the amount of the budget? (e.g. Travelling costs, Per diem, Room for workshop)
52. Was the objective (in this case, ICATT dissemination) achieved?
53. Is the Institution still responsible for disseminating ICATT? If no, why and who then?

54. Of all the Institutions reached and contacted, does any of them now uses ICATT? If yes, how many, which ones and contacts?
55. Were there any factors that made dissemination of ICATT difficult?
56. Were there any factors that facilitated dissemination activities of ICATT or can accelerate these? Recommendations
57. What type of dissemination activity was more successful?
58. How do you see the evolution of dissemination activities of ICATT? Is there any strategy?
59. Is there the need for further dissemination? Was it sufficient what was done?

*Table 8: ICATT Dissemination questions*

### **Implementation**

60. Implementation Level?
61. Name of Institutions responsible for ICATT implementation
62. Location of these Institutions
63. How many institutions implemented ICATT?
64. How many people involved in the dissemination activities and their background/Professional group?
65. Type of ICATT installation made
66. How many installations of ICATT were made and where?
67. How many people are involved in the maintenance and support of the tool?
68. How long did it take to install ICATT?
69. Was there any country/regional or Institutional investment?
70. If yes, what was the amount of the budget? (Computers, per diem of IT people)
71. Were there any factors that made ICATT implementation difficult?
72. Were there any factors that facilitated implementation activities of ICATT or can accelerate these? Recommendations
73. How do you see the evolution of implementation activities of ICATT? Is there any strategy?
74. What do you think it's the general need for other institutions to implement ICATT?

*Table 9: ICATT Implementation questions*

### **Training**

75. Name of Institutions responsible for ICATT training
76. Location of these Institutions
77. How many people involved in training activities and their background/Professional group?
78. Did you need to adapt the existing training curricula of the Institutions to use ICATT?
79. If yes, why? Institutional protocol, national requirement?



- 
80. How was the training done?
81. How many rooms for training? How many computer for training?
82. What type of training was done?
83. Number of people trained and their professional level?
84. When did the first course start?
85. Is the course still available today? If no, why?
86. How long does a course take?
87. How many training sessions were done?
88. For how long did the trainings happen?
89. Was there any country/regional or Institutional investment?
90. If yes, what was the amount of the budget? (Computers, rooms, travelling, per diems)
91. Costs compared with IMCI classical approach training?
92. Was the objective (in this case, ICATT training) achieved?
93. Compare the benefits of using ICATT with another learning tool in the Institution
94. Feedback of the participants in the training registered? (questionnaire or satisfaction survey) If yes can these comments be shared?
95. Were there any factors that made ICATT training difficult?
96. Were there any factors that facilitated training activities of ICATT or can accelerate these?  
Recommendations
97. How do you see the evolution of ICATT as a learning tool? Is there any strategy?
98. In which part of the tool do you see the need of developments? Why?
- 

*Table 10: ICATT Training questions*

### 5.3 Annex 3: List of countries and Interviews performed

#### List of Country Contacts

Country		Country	
Armenia	Contacted	Micronesia	On Hold
Bangladesh	Contacted	Mongolia	Contacted
Burkina Faso	Contacted	Mozambique	Contacted
Cameroon	Contacted	Nepal	Contacted
Colombia	Contacted	Niger	Contacted
Congo (Brazzaville)	Contacted	Nigeria	Contacted
Czech Republic	Contacted	Papua New Guinea (PNG)	On Hold
Egypt	Contacted	Philippines	Contacted
Eritrea	Contacted	Samoa	On Hold
Ethiopia	Contacted	Senegal	Contacted
Fiji	Contacted	Solomon Islands	Contacted
Gabon	Contacted	South Africa	Contacted
Ghana	Contacted	Swaziland	Contacted
India	Contacted	Switzerland	On Hold
Indonesia	Contacted	Tanzania	Contacted
Kenya	Contacted	Tonga	On Hold
Kiribati	On Hold	Uganda	Contacted
Laos	Contacted	Ukraine	Contacted
Lesotho	Contacted	Vanuatu	On Hold
Mali	Contacted	Zambia	Contacted
Malawi	Contacted	Zimbabwe	Contacted
<b>Total countries contacted: 35</b>			

Table 11: List of Country Contacts

**No. of contacts / No. of interviews performed**

<b>Country</b>	<b>No. Contacted/No. Interviewed</b>	<b>Country</b>	<b>No. Contacted/No. Interviewed</b>
Armenia	2 / 0	Micronesia	<b>On Hold</b>
Bangladesh	4 / 0	Mongolia	1 / 0
Burkina Faso	4 / 2	Mozambique	1 / 0
Cameroon	2 / 2	Nepal	5 / 3
Colombia	1 / 0	Niger	2 / 1
Congo (Brazzaville)	1 / 0	Nigeria	2 / 0
Czech Republic	1 / 0	Papua New Guinea (PNG)	<b>On Hold</b>
Egypt	4 / 0	Philippines	5 / 3
Eritrea	2 / 0	Samoa	<b>On Hold</b>
Ethiopia	5 / 0	Senegal	3 / 2
Fiji	11 / 2	Solomon Islands	3 / 0
Gabon	1 / 1	South Africa	4 / 3
Ghana	3 / 1	Swaziland	3 / 0
India	22 / 0	Switzerland	<b>On Hold</b>
Indonesia	3 / 1	Tanzania	10 / 7
Kenya	20 / 2	Tonga	<b>On Hold</b>
Kiribati	<b>On Hold</b>	Uganda	21 / 2
Laos	2 / 1	Ukraine	2 / 2
Lesotho	3 / 1	Vanuatu	<b>On Hold</b>
Mali	16 / 4	Zambia	9 / 4
Malawi	14 / 5	Zimbabwe	2 / 1
<b>Total Contacted: 194</b>		<b>Total Interviewed: 50</b>	

*Table 12: Comparison between the number of contacts and interviews performed*

**No. WHO Representatives contacted / No. of interviews**

<b>Country</b>	<b>No. WHO Contacts/No. Interviewed</b>	<b>Country</b>	<b>No. WHO Contacts/No. Interviewed</b>
Armenia	1 / 0	Micronesia	<b>On Hold</b>
Bangladesh	2 / 0	Mongolia	<b>N/A</b>
Burkina Faso	1 / 1	Mozambique	<b>N/A</b>
Cameroon	1 / 1	Nepal	2 / 1
Colombia	<b>N/A</b>	Niger	<b>N/A</b>
Congo (Brazzaville)	1 / 0	Nigeria	2 / 0
Czech Republic	<b>N/A</b>	Papua New Guinea (PNG)	<b>On Hold</b>
Egypt	2 / 0	Philippines	2 / 1
Eritrea	1 / 0	Samoa	<b>On Hold</b>
Ethiopia	2 / 0	Senegal	1 / 1
Fiji	1 / 0	Solomon Islands	<b>N/A</b>
Gabon	1 / 1	South Africa	<b>N/A</b>
Ghana	1 / 1	Swaziland	1 / 0
India	4 / 0	Switzerland	<b>On Hold</b>
Indonesia	<b>N/A</b>	Tanzania	1 / 1
Kenya	2 / 0	Tonga	<b>On Hold</b>
Kiribati	<b>On Hold</b>	Uganda	2 / 0
Laos	1 / 0	Ukraine	<b>N/A</b>
Lesotho	1 / 0	Vanuatu	<b>On Hold</b>
Mali	1 / 1	Zambia	1 / 1
Malawi	1 / 0	Zimbabwe	2 / 1
<b>Total WHO Representatives: 38</b>		<b>Total Interviewed: 11</b>	

*Table 13: Comparison between the number of WHO contacts and interviews done*

## 5.4 Annex 4: Country detailed analysis

### **Burkina Faso**

Three interviews were conducted from a list of five contacts. All interviewees' have the same profession by training, Medical Doctors, but work in different organizations, WHO Sub Regional Office for West Africa, Ministry of Health and University of Geneva. The other contacts didn't react on the invitation to participate in the survey.

IMCI is not thoroughly implemented in the country, it is not as spread as expected and information to what extent it is implemented is not available. The key stakeholders for IMCI in the country are the Ministry of Health, Family Health Department, WHO and Representatives of the different Paediatrics specialities.

ICATT is not used in Burkina Faso. ICATT adaptation was done in the framework of an on-going implementation survey in the country that compares the ICATT teaching methodology for training with the classical IMCI 11 days training.

One of the interviewees' had his first contact with ICATT in a workshop organized by WHO in Geneva in 2010. Other interviewee learned about ICATT in 2011 due to the survey being implemented in other country (Cameroon).

An adaptation workshop in Ouagadougou in 2012 was organized with representatives of the three countries that were going to participate in the survey: Cameroon, Mali and Burkina Faso. In July 2013 a group of three people, which belong to the same organizations in charge of IMCI, started the adaptation of the ICATT tool. The objective was to produce a version of the ICATT tool that would support the implementation of the survey. This activity was supported financially and technically by the WHO Country Office and Sub Regional Office

No dissemination activities were done in the country. The results and evaluation of the current survey will indicate if ICATT can be scaled-up in the country or not.

The main challenges expressed by the interviewees' regarding the use of ICATT in Burkina Faso are related with reliable infrastructure for supporting the use of ICATT tool e.g. internet connection availability, power supply, computers, etc. Computer literacy was also pointed out as a limitation, as well as time constraints from the experts to meet.

The financial and technical assistance plays an important role as supporting factor of activities in Burkina Faso. It was noticed also that self-training was generally well accepted by participants of the survey and participant were open-minded regarding other teaching methodologies.

Information about future ICATT activities planned is not available. As mentioned before, the results of the survey will determine the further activities and usage of ICATT in Burkina Faso. It is known that the Health System in Burkina Faso is changing, it is planned the introduction of a free of charge health care for all children under 5. For this reason they will possibly have the need of train a large number of health workers in a short period of time and this can be a good opportunity to roll out ICATT in the country and adopt this new teaching methodology.

### **Cameroon**

Two interviews were conducted from a list of two contacts; both interviewees' have the same profession by training, Medical Doctors, but work in different organizations, WHO Country Office Cameroon and University of Geneva.

IMCI is implemented in the country. Information collected indicates 30% of coverage regarding health staff trained in IMCI. The key stakeholders for IMCI in the country consist of a working group constituted by different people working in all aspects of IMCI: Ministry of Health, WHO, Universities (different Paediatrics specialities: HIV, Nutrition, etc.).

ICATT is not used widely in Cameroon. Adaptation was done and now there's an on-going implementation survey in the country that compares the ICATT new method for training with the classical IMCI 11 days training.

One of the interviewees' already knew ICATT from previous working experiences and the other interviewee learned about ICATT for the first time when attending a workshop organized by WHO in Segou (Mali) in 2011.

After the participation of representatives of the Ministry of Health in a workshop in Ouagadougou (Burkina Faso) in 2012 about ICATT and after the implementation survey was presented with a full protocol, a work plan related to ICATT was developed for Cameroon. Adaptation of the ICATT tool was finalized in the same year by the IMCI working group with financial support from WHO National and Sub-Regional office.

Dissemination activities were not done in this country. The plan is to stimulate and encourage dissemination activities, by the lessons learned and main findings of the survey.

Challenges pointed out during the above activities in the country include technical support; e.g. distance supervision and active support to students, IT support, procedures to deal with computer and installation bugs, and time constraints for a more complete adaptation of the tool. On the other hand user friendliness, easy handling of the tool, pictures and videos existing and the use of computers were motivational and supporting factors of the adaptation and implementation survey activities.

Information about future ICATT activities planned is not available. After the survey it is known that there has been some meetings between the IMCI group and the Academia representatives.

## **Fiji**

Two interviews were conducted from a list of eleven contacts; the interviewees' have different profiles, one of them is a Paediatrician and IMCI Trainer/Expert and the other is a Nurse/Lecturer. Both work in educational institutions (Teaching Hospital and a Nursing School). The other nine contacts didn't react to the invitation for the survey.

IMCI is well implemented in Fiji. Trainings started in 2000 and in 2003 IMCI was incorporated in the Nursing curricula. Currently IMCI is integrated in every school's curriculum and there are on-going trainings in pre and in-service. The key stakeholders for IMCI in the country are the Paediatric Clinical Service Network (National Body of Paediatric Services in the Public Ministry), Ministry of Health, Fiji School of Medicine and Fiji School of Nursing.

ICATT is currently used in Fiji. Adaptation and dissemination activities done in the country led to the adoption of ICATT as a teaching method for pre-service and in-service training since 2010.

The interviewees' first contact with ICATT was in 2009, when invited to a workshop organized by WHO. The purpose for the interviewees' to attend this workshop was to be oriented in the ICATT tool, see the potential of it as a new teaching methodology and if possible implements it in their institutions.

Adaptation of ICATT was done in 2009 by the Paediatric Clinical Service Network and the Ministry of Health. Fifteen people (14 Medical staff and 1 IT Expert) were involved in this process. The same institutions were also responsible by the dissemination activities of ICATT in the country. These consisted in workshops (Training of Trainers) and pilot trainings in Medical and the Nursing School.

It is known that ICATT is currently used for pre and in-service training. The interviewees' gave feedback about two institutions in Suva that use ICATT for training since 2010: Colonial War Memorial Hospital (CWMH) and Fiji School of Nursing. The CWMH is a teaching Hospital and has trained until now approximately 280 health workers using ICATT. This in-service course takes 10 days and is supported financially by the MoH and Partners like e.g.

Australian Aid. The Fiji School of Nursing has already trained approximately 400 students since 2009 using the ICATT methodology (pre-service). In both institutions the courses are still available today.

Human resources limitations, computer skills and access to computers were pointed out as main challenges faced in ICATT activities. The fact of ICATT training being less expensive than the classical IMCI training and the opportunity to train a higher number of people per each training session are definitely supporting factors for the current use of ICATT.

There is no specific strategy concerning the use of ICATT in Fiji, but from the interviewees' perspectives the next steps in this matter will consist in continuing to train health professionals, establish mechanisms to certificate people in IMCI every 3 years and revise the ICATT tool content (since 2009 that the tool is not revised or adapted).

## **Gabon**

For this country we only had one contact and one interview was conducted; the interviewee is a Medical Doctor working in WHO Inter-country Support Team.

IMCI is not thoroughly implemented in Gabon and ICATT is not used in the country. The interviewee already knew about ICATT before being invited to the workshop in Segou in 2011. The interviewee went to the workshop as a WHO representative and not so much as a Gabon representative. Nevertheless, the interviewee was interested to learn about the potential of ICATT for teaching and particularly interested in the training player.

After the Ségou workshop, the respondent made a presentation on ICATT in June 2013 to Ministry of Health representatives of the countries that belong to the Central Africa Sub Region (Chad, Gabon, Burundi, DRC and Congo).

The WHO Inter-country Support Team for Central Africa has planned some ICATT activities for 2014. After receiving the approval of Gabon as a host country, WHO plans to present the tool and provide training for 4 persons per country (16 in total) referred above. There are plans to use facilitators from Cameroon because they are already trained from the previous ICATT presentations and participation in the Novartis survey. With funds from WHO Central Africa it is also planned to hire trained persons in ICATT for technical support in the countries, to help with the adaptation and dissemination mainly in training schools. This is tentatively planned for April 2014, depending on the availability of funds.

## **Ghana**

One interview was conducted from a list of three contacts; the respondent is a Medical Doctor working in WHO. The other two contacts didn't react to the invitation to participate in the survey.

The key stakeholders of IMCI in the country are the Ghana Health Service (agency of the Ministry of Health), the WHO and Partners like e.g. UNICEF, USAID, etc. There are on-going trainings in IMCI with the technical and financial support of Partners. Follow up of these trainings is difficult since funding for these trainings are provided by different Partners and the reporting is weak.

The ICATT tool is not widely used in Ghana. Adaptation and dissemination activities of ICATT were done. In terms of using the ICATT for training, it is known that at least one training session in Rural College for Health was done but regarding other institutions there is no specific information.

The respondent learned about the existence of ICATT in 2006/2007 when participated in a field test in Zambia. After that, the respondent attended a WHO workshop in Malawi, in 2011, with the objective of learning more about ICATT and see how the tool could be used to improve IMCI training delivery in Ghana.

Adaptation of ICATT to Ghana context was done in 2011 by an individual consultant from the MoH together with the WHO, the last provided both financial and technical support. Three workshops were organized to disseminate ICATT: one for orientation of National facilitators, in 2011, and the other two to introduce ICATT to representatives of 6 Nursing Schools and the Rural College for Health Sciences several Colleges, in 2011-2012. The workshops consisted in presenting the tool and features and teach participants how to use ICATT for training. These dissemination activities were organized by the Ministry of Health and WHO and these institutions are still responsible for the dissemination activities in the country.

As mentioned before it is known that at least one institution has done some activities regarding training using the ICATT tool. The information available is that some in-service training sessions were conducted in the Rural College for Health using ICATT, but there aren't specific details available about it and the reason for this is the poor follow up/reporting system in place.

The main challenge related with ICATT activities referred by the interviewee are the financial constraints from the stakeholders (both MoH and WHO) for dissemination activities. On the other hand the financial investment done by WHO in the adaptation phase was vital for producing an ICATT Ghana version.

There are no specific plans for further ICATT dissemination activities, but from the interviewee point of view, the next steps include organizing funding and more and longer workshops to have more impact on participants, having a National plan for these activities and targeting educational institutions, like Universities and Schools.

## **Indonesia**

One interview was conducted from a list of three contacts; the other two contacts were indicated by the respondent and did not react on the interview invitation. The respondent is a Medical Doctor by training working in the *Universitas Gadjah Mada*, in Yogyakarta.

The key stakeholders for IMCI in the country are the Ministry of Health and the Indonesian Paediatric Society. Due to the respondent profile the overall view about the status of IMCI in the country was limited. IMCI is implemented in the respondent working Institution in pre-service (1 Lecture) and in-service training. There are several constraining factors in teaching IMCI in other Medical Schools like e.g. IMCI is not yet adopted in pre-service training curricula.

ICATT is not officially used as a training tool in Indonesia; however it has been adapted and was used by one training institution for pre-service training in the frame of a Thesis work.

The respondent was informed about ICATT through Lecturers from the *Universitas Gadjah Mada* that attended a dissemination workshop of ICATT. The first contact of the respondent with ICATT was in 2013 when decided to do a pilot of ICATT training for pre-service students as a Thesis work.

The Ministry of Health worked closely with the Indonesian Paediatric Society to adapt and translate ICATT to Indonesian language. For the pilot ICATT training, the software was installed in the University computers and distributed to students who owned laptops. 98 students participated in this pilot training, 57 for control group and 41 for intervention group. Pre and post-test was done and IMCI knowledge was compared; the difference was significant and the usage of ICATT methodology was very positive. This report will be shared to colleagues in other medical schools in Indonesia since they face the same problems/limitations and can learn through the findings and be more open to use ICATT in medical students training.

Limitations pointed out are not exclusively related with ICATT but yes with the importance of teaching and including IMCI in the training curricula. Plans from the Government and other key stakeholders are not known.



The next steps according to the interviewees' perspective are related with the learning through the findings of the pilot training and for IMCI/ICATT be widely accepted as a teaching methodology by national stakeholders allowing the inclusion of these in the training curricula.

## **Kenya**

Two interviews were conducted from a list with twenty contacts; the interviewees' have different profiles, one of them is a Medical Officer working at the Ministry of Health and the other is a Nurse working as a Quality Assurance Officer in a NGO called PSI that works mainly with Private Clinics. Some of the other eighteen contacts react to the invitation for the survey but were never attainable to participate in the interview.

IMCI is well implemented in the country; the perspective of the Ministry of Health on IMCI coverage is approximately of 38%. The key stakeholders for IMCI in the country are the Ministry of Health together with Partners like e.g. UNICEF, WHO, etc.

ICATT is not used in the country. The only activity regarding ICATT done until now was adaptation.

The first contact of the interviewees' with ICATT was at the Workshop organized by WHO in Kenya in 2013, where both respondents were invited by the Ministry of Health to attend. Purposes for attending were different between interviewees', from the MoH side the objective was to explore a way to scale-up IMCI training in the country and from the NGO side the main purpose was to learn about ICATT and check the potential of the tool for IMCI training.

Adaptation of ICATT was done in 2013 by the Ministry of Health and Partners in the country. The WHO has supported financially the activity that involved around 10 people (Medical staff). To bring all the stakeholders together for discussion was pointed out as the main challenges in this process.

The country is now changing the way of Governance and going through lot of restructuring and maybe could be the reason why there were no more activities after adaptation of ICATT was finished. The next steps for activities involving ICATT from the interviewees' perspective would be to organize several workshops for training of ICATT facilitators (capacity building) and after this to use ICATT at National Level in training Institutions (pre-service) and for in-service training create a platform for training online so that every health worker could have access to.

## **Laos**

One interview was conducted from a list of two contacts; the respondent is a Paediatrician/Research Fellow working in a WHO Child Health Collaboration Centre. The other contact was provided by the interviewee and reacted to the invitation with an email stating that wasn't working in the country when activities related with ICATT were happening and since then, no further developments were made.

IMCI is implemented in the country and although the National Statistics point to a good coverage, in reality this does not happen by several reasons like e.g. IMCI not used in clinical practice and no resources in health facilities (chart books, recording forms, etc.). The key stakeholders for IMCI in the country are the WHO, the Ministry of Health and depending on each province, some partners.

ICATT is not used in the country; nevertheless an incomplete adaptation of ICATT was made to support a workshop (Training of Trainees) that was done in the country to disseminate the tool.

The respondent was informed about the existence of ICATT by the WHO when invited to a workshop in 2009 with the objective being orientated in the ICATT tool and be able to support technically ICATT dissemination activities in Laos acting as a facilitator.

A small adaptation of ICATT was made to be useful for the workshop by demonstrating the flexibility of the tool, helping some participants overcome some of the difficulties of using the English language resource and providing more opportunity for interactions between participants. This adaptation was done by the WHO Child Health Collaboration Centre and was used only for this workshop.

The only dissemination activity done was, as mentioned before, a Training of Trainers (ToT), organized by the WHO Child Health Collaboration Centre in 2009, with the objective to familiarize participants with ICATT and to take them through a training and discuss about how and where the tool should be implemented. 25 participants with distinct profiles attended the ToT (representatives of Nursing and Medical Schools, University of Health Sciences and Vientiane Province).

Challenges highlighted during these activities were the medical skills of the participants, meaning that the medical education capacities were not at the level to perform IMCI, communication/language barriers and also in some cases computer skills limitations.

ICATT activities stopped right after ToT in Laos. Nevertheless, from the interviewee point of view the evolution of ICATT activities will depend and include completing the Lao translation of ICATT, conducting new workshops with the finalized version, establish target groups to be trained and create an implementation plan together with the key stakeholders.

### **Lesotho**

One interview was conducted from a list of three contacts; the interviewee is a Medical Doctor working in the Ministry of Health and Social Welfare. The other two contacts didn't react to the invitation for the survey.

The key stakeholders for IMCI in the country are the Ministry of Health and Social Welfare and Partners like e.g. WHO and UNICEF. IMCI is implemented in pre- and in-service training but information to what extent it is implemented is not available.

ICATT is not used in the country.

The first contact of the interviewee with ICATT was when invited to a workshop organized by WHO in Uganda in 2012. The purpose for the respondent to attend this workshop was to be oriented in ICATT, to see the features and how it works and the different approaches that can be used in IMCI teaching using the tool.

No adaptation, dissemination and training activities were done in Lesotho regarding ICATT. Nevertheless the Ministry of Health is planning a strategy to roll-out ICATT in the country from April 2014. The ICATT tool will be adapted and then disseminated through all Medical and Nursing Schools. The predictable main challenge will be infrastructural conditions like e.g. power supply, internet connection and availability of computers.

### **Malawi**

Five interviews were conducted from a list of fifteen contacts; from the contacts not interviewed some of them were not available for discussion and others did not react on the interview invitation. The interviewees' have different profiles, Medical Doctors, Clinical Officers and Nurses, and work in different organizations, Ministry of Health, Malawi College of Health Sciences, Kamuzu College of Nursing (University of Malawi) and Ntcheu District Hospital.

IMCI is well implemented in Malawi and there are on-going trainings. IMCI is already part of the existing training curricula for students (pre-service training for Nurses and Medical Doctors) and also for continuous education of health workers (in-service training). The key stakeholders for IMCI in the country are the Ministry of Health together with the partners in the country, e.g. WHO, UNICAF, Save the Children, etc.

ICATT has been adapted, disseminated and implemented in Malawi. Information from the respondent's show that ICATT is used mainly in Educational/Training institutions for pre-service training in at least 4 districts: Lilongwe, Kasungu, Mzimba and Ntcheu.

Most of the interviewees' first contact with ICATT was when they were invited to a workshop in Malawi in 2011, organized by WHO. The overall objective of attending this workshop was to be oriented in the ICATT tool e.g. how to use the tool, how to do adaptation of ICATT, how to do the trainings, etc. One of the interviewees' only learned about ICATT tool in 2013 when invited to a workshop that took place in Kenya. The 2013 workshop objectives described by the respondent are similar to the one that happened in Malawi 2011.

Adaptation activities took place after the Malawi 2011 workshop. Representatives of the MoH, Partners and IMCI Coordinators were responsible and involved in this process that lasted for 6 months. The reason why this took so long is related with several changes in the IMCI Malawian guidelines and revisions that took place after each change. The adaptation activities were supported financially and technically by WHO. The IMCI guidelines and ICATT content has been revised in 2013 involving also the same key stakeholders and supporting organization. Whenever there's a WHO technical update, this group meets, evaluates the update and produces the new revised versions.

Dissemination activities were carried out at District Level, District Management Teams and Educational Institutions. The responsible for these activities were the MoH and WHO. The dissemination activities consisted in 2 workshops and one Training of Trainers (ToT); a workshop for District Management Teams, so that District Health Officers of all the Hospitals in the country were oriented in ICATT; a workshop for District Coordinators of IMCI, for them to know that IMCI can also be taught using ICATT Software; a ToT for Tutors of Educational Institutions. In parallel, DVD's containing ICATT software were distributed to several Training/Educational Institutions. These activities were done between the year of 2011 and the year of 2013 and counted with the financial support of the Partners in the country.

ICATT methodology was implemented in Malawian Educational Institutions in the 4 districts that teach Child Health. For each Institution, two facilitators were trained in ICATT and the software was installed in the institution computer laboratories, with the support of the Partners. There was no need to change the training curricula since IMCI was already implemented; the only change with the introduction of ICATT was in the teaching methodology. The courses using ICATT are still available today. ICATT is less used in in-service training, information given by respondent's shows that a pilot for in-service training was done for Clinical Officers in the 4 districts, but no data is available.

The main challenges and difficulties revealed by the interviewees' considering the different ICATT activities include infrastructure limitations e.g. power supply and computers available, lack of human resources and computer literacy. Financial/technical support from the Partners was considered a challenge/limitation but also an important supporting factor for the activities developed until now. The fact of students using the computer to learn and have the materials and resources available to survey was also considered a motivating and supporting factor for the usage of ICATT in pre-service training.

Future activities regarding ICATT will include overcoming the current limitations, establish ICATT as an in-service training methodology and supervise the current tutors and Institutions were ICATT is being used. There are also plans to conduct ToT's for new staff and to roll out ICATT to other districts.

## **Mali**

Four interviews were conducted from a list of seventeen contacts. The interviewees' have different profiles, Medical Doctor and Midwife, and work in different institutions, WHO, *Faculté de Médecine de Pharmacie et d'Odontostomatologie*, *Centres de Santé de Référence Ségou* and *Association des Écoles de Santé Privés*. The other thirteen contacts did not react on the interview invitation.

IMCI is implemented in the country and from the respondent's feedback it reaches all the districts. The IMCI guidelines are up to date, the current manual in use dates back from 2010 and is based on the last revision.

ICATT is not used in the country. The interviewees' first contact with ICATT was in a workshop in Ségou, Mali in 2011 organized by WHO. The goal of this workshop was to orient participants in the ICATT tool.

Although ICATT is not currently used in Mali, from the interviewees' feedback it is known that after the workshop in Mali, there was another workshop, involving MoH representatives and a group of IMCI experts, to work in ICATT adaptation. This was done in 2012, but since then the MoH has not communicated the finalization of the adaptation or further activities regarding ICATT tool. One reason for this can be the Northern Mali conflict on-going since January 2012. The data of the interviews also show there is a comparative survey between two districts in the country and between the two training types (manual-based and ICATT) and some discussions have started with the training schools of Bamako to include ICATT in their training systems so that health staff learns the IMCI directly on ICATT.

Some limitations and challenges concerning the possible implementation and use of ICATT were referred by the interviewees' and include: financial support, level of computer literacy, capacity for follow up and overall infrastructure limitations, availability of computers, power supply and internet connection.

A supporting factor stated by the interviewees' for the roll out of ICATT in Mali is that the manual-based IMCI training takes eleven days, making this training too long and too costly. ICATT gives the possibility of shorter training at regional or district level, where it is most needed. Also individual continuous education is possible with ICATT (self-training) but in this case respondents indicate that technical support is required. ICATT could also be ideal for students and it could reduce the number of training sessions and the costs of pre-service trainings.

There is no information about future activities regarding ICATT in Mali.

## **Nepal**

Three interviews were conducted from a list of five contacts; the other two contacts were indicated by the interviewees' and did not react on the interview invitation. The interviewees' have different profiles, Medical Doctor/Professor, Medical Doctor/IMCI Manager and Public Health Specialist, and work in different institutions, Ministry of Health, WHO and Institute of Medicine, Tribhuvan University.

IMCI program has been rolled out to all 75 districts in Nepal. In-service training is on-going (medical doctors and paramedical staff). The key stakeholders for IMCI are the Ministry of Health and Partners, like e.g. WHO, UNICEF, Save the Children, USAID, etc.

ICATT is not used in Nepal. The interviewees' learned about the existence of ICATT when attended a workshop organized by WHO in India in 2011. The main purpose for the interviewees' to attend this workshop was to be oriented in the ICATT tool for further discussing and planning the possibilities of its use in Nepal.

Although ICATT is not currently used in Nepal, from the interviewees' feedback it is known that after this workshop there were several discussions with the Ministry of Health about the strategy to roll out ICATT in the country at National Level or Regional level, for pre- and in-service training and that exists a plan to incorporate ICATT as regular activity for 2017. Adaptation of the ICATT tool for Nepali Language is a planned activity for 2014.

Challenges concerning the future activities mentioned above include financial support, language limitations, since the software does not have Nepali characters and resources competition, meaning that there are several programs with different goals in the country.

## **Niger**

One interview was conducted from a list of two contacts; the interviewee is a Public Health and IMCI Specialist working in the Ministry of Health; the second contact didn't react to the invitation to participate in the survey.

In Niger currently, all districts are implementing IMCI, the majority of health workers are trained in IMCI but adaptation and staff turnover require additional trainings to keep up with the change. IMCI key stakeholders in the country are the Ministry of Health, Academia and Partners.

ICATT is not used in Niger. Only partial adaptation of the tool was achieved and a Training of Trainers (ToT) was organized in order to disseminate the tool.

The respondent learned about ICATT when invited to a workshop in Bamako (Mali) in 2011. The purpose for attending this workshop was to be oriented in ICATT and report back to the Ministry of Health about this training and the potential of the software for further implementation in the country.

After the 2011 Mali workshop, an evaluation of medical training institutions (schools) was performed in order to identify which schools have the resources to take on ICATT software in their curriculum. Two retreat workshops were conducted in Niger to adapt ICATT to the Niger IMCI and in particular the inclusion of HIV, the new-born care, etc. But the adaptation was not completed due to the lack of funding.

A five-day ToT was organised for 17 trainers from the training schools identified in the assessment as having already the conditions to deliver an ICATT-based training but this training was based on the "international", non-adapted version of ICATT because the adaptation has not been finalised. Technical support and assistance to this ToT was provided by WHO. Currently, it is known that some of these 17 trainers use a non-adapted version of ICATT in their teaching course, but no more information is available.

Main challenges and difficulties considered during these activities were the financial constraints and language limitations (need to provide material in French language in workshops). Nevertheless, the software was described by the interviewee as flexible and easy to use, and the main benefits pointed out include cost reduction and ICATT availability of information (Library).

No information was available concerning future ICATT activities.

## **Philippines**

Three interviews were conducted from a list with five contacts; the respondents are medical doctors by training, but working in distinct organizations, WHO, Department of Health and University of Philippines.

The key stakeholders for IMCI in the country are the Department of Health together with some partners, e.g. WHO and UNICEF that provide financial and technical support. Information collected indicates that IMCI guidelines have been adapted and pre-service and in-service training in IMCI is done.

ICATT has been adapted and disseminated. A new adapted version is currently being produced by the Department of Health. Regarding training using ICATT, it is known that the tool is used mainly at academic level in pre-service training, but no detailed information was available. The first contact of the respondents with ICATT was through workshops organized by WHO in 2008 to provide update in new IMCI guidelines and orientation in the ICATT tool in order to build capacity for further dissemination, implementation and training in the country. Adaptation of ICATT was made between 2009 and 2010 by an Individual Consultant under the responsibility of the Department of Health and with technical support from WHO.

Dissemination activities were done at National and Regional Level. These activities were organized by the Department of Health and WHO and consisted of workshops attended by

Regional Coordinators, IMCI Coordinators and people from the Educational/Academic area, e.g., directors, professors and tutors from several academic institutions.

The ICATT tool is used for training students at University of the Philippines College of Medicine and health workers in the University Hospital, both in Manila. The first course started in 2008 and it is still available today having trained approximately 1300 students (pre-service training) and from 125 to 150 health workers (in-service training). Concerning in-service training, health workers still prefer doing the 11 days IMCI Classical course because they are not comfortable in using the computer and prefer to do more practical training.

Challenges faced in the country in the different activities related with ICATT include lack of human resources available mainly for facilitation and technical support purposes. There is demand by the Academia to have the new version of ICATT and be able to disseminate it and use it for training, but the Department of Health has not been very responsive in this matter. Nevertheless, it is known that the Department of Health has a 5 years plan concerning Child Survival Strategy and one of the interventions includes the usage of ICATT as a methodology to teach IMCI.

### **Senegal**

Two interviews were conducted from a list of three contacts. The interviewees' have the same profession by training, Medical Doctor, but work in different institutions, WHO and *Faculté Médecine*, Dakar. The other contact didn't react on the invitation to participate in the survey.

IMCI is implemented in the country. There is no accurate data about the current IMCI coverage but according to the *Rapport du programme national de la survie de l'enfant* from the MoH in 2005, more than 60% of districts implement the clinical IMCI. Approx. 85% of districts implement IMCI (community) with support from the Partner World Bank. In 2013 an update of the country IMCI guidelines was done and currently the new manuals are being printed. The key stakeholders of IMCI in the country are the MoH together with an expert group in Child Survival and WHO.

ICATT is not used in Senegal.

Although both interviewees' attended a workshop in 2011 organized by WHO in Bamako, Mali, the respondent's first contact with ICATT happen in different times. One of the respondents already knew the ICATT Software by receiving information of other WHO Country Offices. The other interviewee learned about ICATT at the workshop in 2011 in Bamako. The objective of this workshop was to introduce ICATT tool to the countries, by presenting the tool and other country experiences.

After the Bamako workshop, the potential of the ICATT Software was formally reported to the MoH but no activities followed after that. It is known that an informal and partial adaptation of ICATT was done by the group of experts but it remains informal. Partners have also expressed to the MoH the intention of introducing ICATT in two or three regions but no feedback was given.

Main challenges that were already referred by the interviewees' regarding the implementation and use of ICATT in Senegal include lack of computer skills, technical support and infrastructure limitations e.g. power supply, internet connection and availability of computers. The potential reduce of training costs, the attractive teaching methodology of ICATT, and user-friendliness were pointed out by the respondents as main supporting factors of ICATT use.

There's not a lot of information about future activities related with ICATT. The respondent's feedback show that there's now a strong commitment of the MOH to introduce ICATT for initial training and continuous training of health staff and this is an activity which is in the MoH 2014 work plan. From the interviewees' point of view, dissemination of ICATT would entail first to do capacity building organizing workshops and training facilitators in ICATT. After

this, introducing the tool in the Educational Institutions in pre-service training would be a good starting point for the rolling out of ICATT.

### **South Africa**

Three interviews were conducted from a list of four contacts; the interviewees' have different professions by training, Medical Doctor and Nurse and work in different institutions, MoH, Partner Zoe-Life (NGO) and University of KwaZulu-Natal. Two interviewed respondents were indicated by the one of the interviewees'.

The key stakeholders for IMCI in the country are the Ministry of Health (Child Health Department) and the Partners in the country. IMCI is well implemented in South Africa. It is included in the training curricula of Universities and is also implemented in in-service training. There are on-going trainings in different provinces, within the provinces the trainings are not very regular, and from the respondents point of view there are gaps in implementation of IMCI since the monitoring of the quality of implementation is not supervised or followed up.

ICATT is used in the country. It has been adapted, disseminated and implemented in some regions/institutions. The first contact of the interviewees' with ICATT happened in different times through different ways. One of the interviewees' attended a workshop organized by WHO in Rwanda in 2011 to be oriented in ICATT and its adaptation features, and the other two interviewees' knew about ICATT when joined their organization (2010-2011).

Adaptation activities of ICATT took place in 2011. The organizations responsible by this process where the same as responsible by IMCI in the country, MoH and Partners. The adaptation process was long, it lasted a couple of months, but it was finalised in 2012.

Several dissemination activities have happened in South Africa. ICATT training has been piloted for in-service training in 2010-2011, and it consisted in a 4 months small scale training using distance learning. The evaluation of this in service training pilot was done and proven to be effective. In November 2013, with the support of WHO, there was a two week National Workshop with representatives from all the provinces and also from training Institutions, where approx. 140 ICATT facilitators were trained. There is also an on-going pilot training for pre-service in the University of KwaZulu-Natal. The institution has included ICATT in the training curricula and the course using ICATT has the duration of 3 days. The feedback of this pilot training has been very positive and post-training evaluation is now being done.

Taking into account the interviewees' feedback, availability of computers, low level of computer literacy and lack of technical support are the main challenges faced in the country concerning ICATT use.

The pilot trainings showed that participants felt motivated in using computerized applications for learning, indicating that ICATT has an attractive methodology and the tool is simple and user-friendly. The fact of ICATT having the resources and tutorials available is also seen as a positive point and as a supporting factor to roll out ICATT in training institutions.

Interviews data show that the goal for the present year is to ICATT Facilitators trained in the 2013 National Workshop roll out trainings in the country using the ICATT methodology and provide feedback to the Department of Health (MoH). There are also discussions happening nationally related with IMCI distance learning using ICATT, and to test different approaches in different environments. ITEC Partner is supporting these activities, reproducing the materials for this activities, they have an action plan starting April 2014 where ICATT will be disseminated and implemented through the Regional Centres as IMCI is (these Regional Centres are the ones doing the IMCI training).

### **Tanzania**

Seven interviews were conducted from a list of ten contacts; the interviewees' have different professions by training, Medical Doctors, Assistant Medical Officers and Professors and work

in different institutions like Training Centres, WHO and Ministry of Health from Mainland and Zanzibar. The other contacts didn't react on the invitation to participate in the survey.

Although IMCI is implemented in all districts, there are differences in coverage, there are districts with very good coverage and other with lower coverage depending on the resources availability and also how active the Council Management Teams are. There are on-going activities in the country regarding IMCI training. The key stakeholders for IMCI in the country are the Ministry of Health and Social Welfare and Partners, like e.g. WHO, UNICEF, USAID, etc.

ICATT has been adapted, disseminated and implemented in Tanzania. It is used in the country mainly in educational/training institutions mainly for pre-service training; this is the current situation in the Mainland. In Zanzibar, the adaptation process was now finished and the next steps will consist in training facilitators and introduce ICATT approach in Medical and Nursing Schools in Zanzibar.

The interviewees' knew about ICATT either through participation in workshops organized by WHO, through people that attended the mentioned workshops or by participation in ICATT pilot trainings in Tanzania around 2008. The main goal for the interviewees' to learn about ICATT was to be oriented in the tool to be able to build capacity (training facilitators) and bring this knowledge to the institutions where they worked and manage to implement and train people using ICATT.

Adaptation of ICATT was done in Tanzania by individual consultants together with Ministry of Health and technical and financial assistance from the WHO. There's work being done to adapt ICATT into Swahili language, but this is not yet finished.

Dissemination activities were done across the country at National level: Training of Trainers conducted to build capacity, dissemination in Medical, Clinical Officers and Nursing schools, Training Centres, etc. These activities were funded mainly by WHO and other Partners in the country. It is known that some informal dissemination activities among training centres were also done like e.g. send a trainer from one Centre to other Centres with the software for them to install and be trained in ICATT methodology so that they can use it in their trainings. Several DVD containing the ICATT software were distributed during these dissemination activities.

ICATT is implemented and used for training in several training institutions. Taking into account the information and experiences of the interviewees', the main type of training done in Tanzania using ICATT is the pre-service training and these courses are still available today.

Challenges referred during different ICATT activities include difficulties in translating the tool to Swahili, availability of tools for training, mostly in rural areas they are using projectors when teaching IMCI using ICATT and lack of financial support concerning training activities. There are also some limitations regarding computer skills of health workers, and it is believed that ICATT didn't progress as much in in-service training due to this factor, from the interviewees' perspective; students are more open and comfortable when using computers. Not having available an institution where people could just request/order a DVD of ICATT was also pointed out as a limitation.

Several supporting factors were indicated during the interviews like the fact of most colleges having computers, the Government commitment to include IMCI in schools curricula and the excellent collaboration between the MoH and consultants responsible by adapting ICATT.

In Zanzibar future activities will pass by capacity building actions, training ICATT facilitators, and implementing ICATT in pre-service training in medical schools, but financial support has to be found and WHO was contacted to provide support.

The next steps in mainland Tanzania will consist of developing a clear strategy on how to adopt and roll out ICATT at national level. Interviewees' do not have information about a MoH strategy and this is pointed out to be the main problem in disseminating ICATT at a country level. There are some institutions using ICATT but there is no plan to scale up the



tool in these training institutions. A plan/strategy must be established and the connection between the Ministry of Health and Ministry of Education has to be strengthened so that information can flow easily and be shared.

## **Uganda**

Two interviews were conducted from a list of twenty-one contacts; some of the other contacts react on the interview invitation but didn't show up to the interview or stated that didn't have experiences to share. Although the interviewees' have distinct professions by training, Nurse and Medical Officer, they are both IMCI National Trainers and both work for different District Governments, Kumi District Local Government and Mpigi District Local Government.

IMCI is implemented in several regions of Uganda and this depends largely on the donors funding. The key stakeholders for IMCI in the country are the Ministry of Health (MoH), Districts Local Government and Partners (WHO, UNICEF, Save the Children, USAID, etc.). The IMCI coverage is approximately 40%.

The interviewees' were invited to a workshop about IMCI and the ICATT tool organized by WHO in Uganda 2012 and this was the first time they heard about ICATT. The purpose was to share country experiences in IMCI guidelines adaptation and to be oriented in the ICATT tool.

ICATT is no used in the country. The adaptation of the tool wasn't done since the country is still in the phase of IMCI guidelines local adaptation. There has been several meetings between the MoH, WHO and UNICEF following the workshop in 2012 and it has been a number of interactions in order to finish the country IMCI guidelines and the changes that need to be updated, so it is expected that sooner or later the MoH together with WHO will deliver the latest version of IMCI guidelines to be adapted into ICATT tool.

Although there are no on-going activities related with ICATT, some possible challenges were already referred by the interviewees': access to infrastructure in rural areas will be a limitation as well as financial support for further activities.

The evolution of ICATT activities in the country is obviously dependent on finalizing the IMCI guidelines local adaptation. The Ministry of Health and WHO are leading the Ugandan ICATT adaptation activities. The MoH plans to share the adapted ICATT version after finalizing it, and organize workshops to train facilitators and build capacity for ICATT implementation in training institutions for pre and in-service training.

## **Ukraine**

One interview was conducted. This contact was provided by the Swiss TPH. The interviewee is a Medical Doctor working in the Methodology Department of Implementation IMCI in Ukraine as a National Trainer.

IMCI is not implemented in the country. ICATT was used for the introduction of IMCI, this was supported financially by UNICEF/WHO but currently there is no funding and the main activities have stopped. People involved in the project have been working in monitoring and evaluation, control visits to see how the guidelines are being implemented.

The interviewee first contact with the ICATT tool was through the UNICEF/WHO project mentioned above that has been initiated in 2008. The goal of this project was to adapt, disseminate and provide trainings in IMCI using ICATT.

Adaptation activities have started in 2008, involving UNICEF, WHO and a group of experts in Child Health. These activities were supported financially and technically by UNICEF and WHO.

Dissemination activities consisted in distributing ICATT DVD's to Universities and a pilot training in 2012 of medical staff in the Ivano-Frankivsk province (3 rayon's). There were 9

training sessions and approx. 200 people were trained. In each rayon an educational room was created with laptop and ICATT for medical staff to use. Post training visits were conducted and results noticed: nurses find guidelines very simple and make children assessment easier. Medical staff trained feels more comfortable in making proper decisions and health care choices. There's now more information for counselling and promote health behaviours and the feedback is very positive, not only from medical staff but also from the parents. After implementing IMCI the mortality and admissions in these Hospitals decreased.

Regarding main challenges in the country and during ICATT activities the interviewee feedback shows that the country size (big population of health workers) and fragmentation (22 provinces) is a limitation for future dissemination and implementation activities. Motivation to learn and computer skills and availability were also referred as a limitation. Financial and Governmental support are currently also a challenge regarding future activities involving ICATT.

From the interviewee perspective the future steps concerning ICATT rely on the attention putted on implementation in medical colleges and medical universities and directly on each rayon and city Hospital responsible for first level of care for children. There is a need for IMCI in the country. The training curricula's must be changed in Universities and Training Institutions. Some strategic actions were already developed e.g. prepare on each district a minimum of 10 trainers so that after they could start the training of medical staff on their own possibilities, but there were financial limitations and problems with the real implementation of IMCI guidelines, e.g. drugs and medicines to give to children not available or parents could not afford.

## **Zambia**

Four interviews were conducted from a list of nine contacts; some of the other contacts react on the interview invitation but didn't show up to the interview. Two of the interviewee's contacts were provided by other interviewee. The respondents have distinct professions by training, Nurses and Medical Doctors, and work for different institutions, MoH, WHO, University Teaching Hospital and Kasama School of Nursing.

IMCI is well implemented in every district in Zambia. There is a component of IMCI in the pre-service training curricula and in the clinical environment Nurses and Medical Officers use IMCI also. The key stakeholders for IMCI are the MoH, Ministry of Community Development and the several Partners in the country that provide both financial and technical support. Some aspects in IMCI are assessed and monitored quarterly, but still there's a big gap in the observation of clinical practice.

ICATT has been adapted, disseminated and used partially for training in some institutions. Most of the interviewees' had his first contact with ICATT in workshops organized by WHO in Malawi in 2011 and in Uganda in 2012. The goal for attending these workshops was to be introduced and oriented in the ICATT tool in order to further implement this methodology the country Institutions.

Adaptation of ICATT started in 2011-2012 involving several organizations, MoH, WHO and other Partners. It was a long process; it took almost two years with several iterations and several updates to have a finalized version. Reasons for this that were referred by the respondents relate to getting consensus and bring all stakeholders together for technical meeting was very difficult.

Two Training of Trainers were conducted as dissemination activities for ICATT and copies of ICATT Software were distributed in CD's. One of the ToT was done in 2012 for Nurse Tutors and Lecturers of Nursing Schools across the country. The other ToT for Nurses and representatives of the Clinical Officers College was conducted in 2013. ICATT Software was distributed in both workshops and these workshops were supported financially by the IMCI stakeholders.

Data from the interviews show that some of the participants after this workshop rolled out ICATT in their institutions and are currently using it for pre-service training. Taking into account the respondent's feedback there's no complete training in ICATT being done. Some training Institutions are just using pieces of the tool, e.g. material/resources and projecting it, because adaptation was not finished until last year.

From the respondent's point of view, the lack of computers is the most visible limitation, there are no computers available in the School and students cannot afford laptops. The power supply and internet connection can also be a limitation in some rural areas of the country. Limitations in terms of Human Resources were also referred, there are not enough trainers for the practical part of the teaching, the MoH regarding this subject to request more trainers, but they don't have these resources.

The interviewee's also mentioned supporting factors for success of the activities related to ICATT until now and these include the leading and support, technical and financial, from the MoH and WHO, the enthusiasm of students when using ICATT and positive feedback, the fact of the application be "portable", can be used any time since it's installed in their laptops, and last but not least, the increase of training capacity, more students, less Tutors needed.

Respondents refer the distribution of ICATT SW for the rest of the Training Institutions, extension to Medical Schools, as an action for this year and that since adaptation was only finished last year, training institutions will be able to use the whole package of the tool during this year and there will be continuous feedback from MoH of the trainings performed using ICATT.

## **Zimbabwe**

One interview was conducted from a list of two contacts; the interviewee is a Medical Doctor working at WHO Inter-country Support Team for East and Southern Africa. The other contact did not react to the invitation for participating in the survey.

IMCI is implemented in the country. The key stakeholders are Ministry of Health and Partners.

ICATT is not used in Zimbabwe, only an adapted version was done. The respondent first contact with ICATT was in 2006 in the WHO Annual Review Meeting, he was involved in early review of experience in Tanzania in October 2010 and was an ICATT co-facilitator in several workshops (Malawi 2011, Uganda 2012, Kenya 2013).

Zimbabwe has gone through difficult times in terms of country governance and restructuration so no major activities regarding ICATT were done. WHO has trained three people in ICATT: 1 from the Ministry of Health, one from WHO and one from University of Zimbabwe. There was a plan to use the trained person from the University to disseminate and introduce ICATT into pre-service training in the University of Zimbabwe. Unfortunately this did not work out well and there was no good feedback from the department of Paediatrics from the University. Due to this, an additional person has been trained (Head from the Department of Paediatrics from Zimbabwe) in the University of Durban (South Africa), and this person has made an adaptation for Zimbabwe, will come back to the country and try to disseminate this through the Medical and Nursing schools.

Besides governmental restructuration, also assessment of pre-service students and compatibility with computers were referred as challenges regarding ICATT activities in the country. The next steps for dissemination of the tool will consist of planning additional ICATT orientation workshops in 2014 for senior program managers, senior leadership of training institutions. For 2014 the investment will be promotion and start the trainings using ICATT tool.