INTERNATIONAL UNION FOR
PHYSICAL AND ENGINEERING SCIENCES
IN MEDICINE

Incorporating the International Federation for Medical and Biological Engineering and the International Organization for Medical Physics

Affiliated with the International Council for Science (ICSU)

Report of the Health Technology Task Group (HTTG) to IUPESM AC1 and GA at the World Congress 2012 Beijing, China

Members of the HTTG Steering Committee:

Joachim Nagel, Chair
Cari Borrás, Co-Chair
Andrei Issakov, Executive Secretary
Maria-Esperanza Castellanos
KY Cheung
Fernando Infantosi
Ratko Magjarevic

The TOR for the Health Technology Task Group are included as attachment 1.

MISSION

The mission of the Health Technology Task Group is to promote health and quality of life through the advancement of application and management of health technology. In pursuit of its mission the HTTG promotes international cooperation and communication among those engaged in health-care technology.

CHARGE

The charge to the Health Technology Task Group is to assist countries in:

- defining their needs for health technology and human resources;
- formulating policies and implementation strategies on acquisition and utilization of appropriate health technology;
- developing appropriate infrastructure for adequate management and utilization of health technology;
- identifying and rectifying health system constraints particularly through training and capacity building.

TASKS

The tasks of the Health Technology Task Group are:

- to identify and advise on specific needs of individual countries;
- to assess and advise on appropriateness of health technology;
- to identify and help rectifying health system constraints for implementation and adequate management and utilization of health technology;
- to identify and advise on training needs for implementation and utilization of health technology;
- to cooperate with and provide professional support to WHO and other international organizations on planning and implementation of health technology programs and initiatives;
- to determine policy concerning HTTG activities in collaboration with national and international partners and stakeholders;
- to coordinate and harmonize regional and global activities on health technology;
- to promote advocacy of the HTTG, building and maintaining partnerships with stakeholders and mobilizing resources for HTTG activities;
- to organize and support regional and international meetings and workshops on appropriate health technologies.

WORK PROGRAM 2009 - 2012

From 2006 to 2009, HTTG had a strong record of most successful cooperation with WHO. As a result, it was agreed upon between IUPESM and WHO, that IUPESM would apply for NGO status which was supposed to become effective in January of 2010. The following HTTG Collaboration Plan for the Years 2010-12 was part of the IUPESM application to obtain NGO status.

1. IUPESM World Congress on Medical Physics and Biomedical Engineering
2. Collaboration with the World Alliance for Patient Safety
3. Participation in the WHO Global Health Workforce Alliance (GHWA)

4. Cooperation in the Health Care Technology Task Force (HTTF)
5. Participation and collaboration in the WHO initiative Health Action in Crises
6. Collaboration in the IUPESM Health Technology and Training Task Force - Appropriate Health Technologies and Training for Developing Countries
7. Participation in WHO's Global Initiative for Safe use of Radiation in Medicine
8. Cooperation towards the regulation of the Clinical Engineering and Medical Physicist Professions as an important contribution to quality assurance in health care
9. Collaboration in the WHO-Luxembourg Program "Strengthening Healthcare Infrastructure and Technology Management for Optimized Health Service Delivery"
10. Cooperation in the 2nd International Conference on the Development of Biomedical Engineering in Vietnam, January 2010
11. Cooperation in setting up the IUPESM journal 'Health and Technology'
12. Cooperation in the Multidisciplinary European Low Dose Initiative (MELODI)
13. Preparing an Electronic Health Record (EHR) resolution
14. Collaboration in the virtual Global Health Professions Network fostering the contributions of health professions to primary health care and the global health agenda
15. Collaboration in Advanced IUPESM/IFMBE/IOMP/ACCE Healthcare Technology Management, Clinical Engineering and Medical Physics Workshops
16. Cooperation with the Health InterNetwork Access to Research Initiative, the HINARI program
17. Cooperation with the Global Observatory for eHealth (GOe)
18. Participation in WHO governing body meetings

Within the IUPESM/WHO/Lux-Development Cooperation, funding for the work of the HTTG had been discussed (see Attachment 2).

All planned co-operational projects with WHO were discontinued or were limited to the participation of individuals on a personal basis, when WHO stopped the IUPESM application for NGO status in January of 2010.

HTTG WORK DONE DURING THE TERM 2009-2012

1. Publication of the First WHO Call for Innovative Technologies that address global health concerns, 2009, and announcement of the results, 2010
2. Participation in the First Global Forum on Medical Devices, Bangkok, Thailand, 2010
3. Soliciting of papers for the IUPESM journal *Health and Technology*
4. Cooperation with the WHO Patient Safety Program (previously the World Alliance for Patient Safety)
    a. In April 2012, WHO's Patient Safety Program released the results of the first multi-country study on hospital adverse events, conducted in the Eastern Mediterranean and African Regions of WHO. These data show that patient safety concerns are as important in these regions as had been previously recognized in more economically developed ones. Results from the Eastern Mediterranean/African Adverse Events Study reveals that patients are suffering preventable permanent disability or dying due to unsafe health care in developing and transitional countries. On average, health-care related harmful incidents affected 8 in every 100 patients studied. These are conservative estimates that probably only reveal the tip of the iceberg, but that nevertheless highlight the importance and urgency of addressing patient safety globally.

b. The Patient Safety Curriculum Guide (2011)
Biomedical and clinical engineers are important to providing a safe environment. A Curriculum has been developed to support university educators in teaching patient safety to their undergraduate and postgraduate students (the Curriculum is not for professionals working in hospitals and health facilities).
There are several core chapters about patient safety within the curriculum guide that are of interest for biomedical engineers. However there is no specific chapter on biomedical/clinical engineering or medical physics.
The Patient Safety Program is now developing e-courses based on the Patient Safety Curriculum to be launched in late 2013. HTTG has been offered the possibility to develop appropriate courses regarding biomedical/clinical engineering and medical physics.
In 2010, the Patient Safety Curriculum Guide has been discussed in a global virtual discussion forum including 1602 participants from 119 countries.

c. Patient Safety Virtual Global Discussion Forum
Joining the worldwide virtual Patient Safety knowledge network and Patient Safety Virtual Global Discussion Forum, contributing to the revision of the WHO Multi-Professional Patient Safety Curriculum Guide, 2010.

d. Participation in the WHO Webinar session on the Methodological Guide for Assessing and Tackling Harm in Data Poor Hospitals, 2011.

5. Revision of the Health Technology Management (HTM) Impact Indicators worked out by Joachim Nagel
This project was linked with work on HT policy indicators which Roger Schmitt and Bastiaan Remmelzwaal were doing in 2009 and started to pilot in Namibia, Senegal and Laos with Vietnam starting soon. It was necessary to link both sets of indicators and put them together in one cohesive set which would be another contract for HTTG. This work has been accomplished in 2010.

6. During the WC2012, on May 30, 2012, the third HTTG Workshop will take place; the subject being Telemedicine for Developing Countries. It is expected that, like in past workshops, recommendations will be drafted and if at all possible, be published.

TENTATIVE WORK PROGRAM 2012 – 2015

For the next three year term, i.e. 2012 – 2015, a wholly new work plan has to be set up for the HTTG. The main questions are whether there will be any reliable cooperation with WHO and whether the HTTG will be able to find funding from sources other than IUPESM and WHO.

A list of potential future activities follows:

- Continue organizing HHTG workshops at various international, regional and national conferences.
- Preparation of publications and guidelines on various aspects of health technologies.
- Development of projects to be funded by foundations and governments active in the field of health technologies.

- Support the process of certification of medical physicists and biomedical engineers as well as the regulation of these professions within the health care systems, initiated by the IFMBE and the IOMP.
- The Patient Safety Curriculum Guide: developing e-courses based on the Patient Safety Curriculum.

The co-chair of the HTTG Steering Committee, Dr. Cari Borrás, requested that her past activities and plans for future work within HTTG, originally contained in this report, be deleted. She wished to submit a separate report. Thus, this report does not reflect all activities and future plans of the HTTG.

Report duly submitted by

Joachim H. Nagel
Chair, HTTG Steering Committee

Stuttgart, May 23, 2012

Attachment 1

Health Technology Task Group (HTTG)
Terms of Reference

1. The mission of the Health Technology Task Group is to promote health and quality of life through the advancement of application and management of health technology. In pursuit of its mission the HTTG promotes international cooperation and communication among those engaged in health-care technology.

2. The charge to the Health Technology Task Group is to assist countries in:
   (a) defining their needs for health technology and human resources;
   (b) formulating policies and implementation strategies on acquisition and utilization of appropriate health technology;
   (c) developing appropriate infrastructure for adequate management and utilization of health technology;
   (d) identifying and rectifying health system constraints particularly through training and capacity building.

3. The tasks of the Health Technology Task Group are:
   (a) to identify and advise on specific needs of individual countries;
   (b) to assess and advise on appropriateness of health technology;
   (c) to identify and help rectifying health system constraints for implementation and adequate management and utilization of health technology;
   (d) to identify and advise on training needs for implementation and utilization of health technology;
   (e) to cooperate with and provide professional support to WHO and other international organizations on planning and implementation of health technology programs and initiatives;
   (f) to determine policy concerning HTTG activities in collaboration with national and international partners and stakeholders;
   (g) to coordinate and harmonize regional and global activities on health technology;
   (h) to promote advocacy of the HTTG, building and maintaining partnerships with stakeholders and mobilising resources for HTTG activities;
   (i) to organise and support regional and international meetings and workshops on appropriate health technologies.

   In order to assist acquisition of appropriate health technology, the HTTG may set up a Medical Equipment Donations Assessment and Advisory Service to match health technology donations with appropriate recipients.

   In cooperation with WHO and concurrent with the actions requested by WHA Resolution 60.29 on Health Technologies, the HTTG maintains a global program for cooperation with the WHO Regional Offices, all developing and donor countries, as well as other international organizations to systematically analyze the needs of countries and to find appropriate solutions, individually tailored to the needs of the existing health care systems and overall infrastructure.

4. The Task Group will have a Steering Committee consisting of a Chair and Co-Chair, symmetrically representing IOMP and IFMBE, an Executive Secretary and four regular members, two of these representing IFMBE and two representing IOMP. All members of the Steering Group are appointed by the IUPESM Administrative Council for a term of three years between General Assemblies. The members of the Steering Committee can be reappointed for an unlimited number of terms. It is the responsibility of the Chair and the Co-Chair of the Group to recommend the regular members of the Committee to the AC for their appointment.

5. The Steering Committee can co-opt up to four members and appoint working groups within the HT Task Group involving as appropriate and possible IFMBE and IOMP Divisions, Committees and Programs.

6. The Task Group reports to the IUPESM Administrative Council.

7. The responsibilities of the Co-Chairs:
   (a) implementing the HTTG policy;
   (b) calling and chairing the HTTG meetings;
   (c) reporting to the AC;
   (d) initiating and maintaining the HTTG activities, and providing the overall leadership to the HTTG work.

8. The responsibilities of the HTTG Executive Secretary:
   (a) strategic planning, coordination, direction, technical leadership, operational management and monitoring of the HTTG program of work;
   (b) planning, organization, coordination, overseeing the implementation, and providing substantive inputs into projects, studies, reports and other activities within the HTTG program of work, and as decided by the HTTG Steering Committee.
   (c) advocacy, promoting visibility and leadership of HTTG, building and maintaining partnerships with stakeholders, and mobilizing resources for HTTG activities.
   (d) advising HTTG Co-Chairs and Members of the Steering Committee on policy matters concerning the operation of HTTG, its work in countries, and interaction with national and international partners and stakeholders.
   (e) organizing HTTG Steering Committee annual meetings, preparing HTTG annual operational plans, reports and budgets.

9. Procedures

   At the beginning of its three year term, the Steering Group develops an operational plan to achieve its most pressing and promising goals. The committee shall hold at least one annual meeting, physical or virtual, to take care of its responsibilities. Once a year, the operational plan is updated and a report is submitted to the AC.

Attachment 2

Proposed WHO Contracts with the IUPESM Health Technology Task Group (2009)

- Revision and publication/dissemination of the HTM impact indicators, done by Joachim Nagel ($15K).

- Country piloting of HTM impact indicators.
  Amount of the contract: $20-25K per country, total $120-150K for six Luxembourg countries, including personnel costs and direct country activities.

- This project is linked with work on HT policy indicators which Roger Schmitt and Bastiaan Remmelzwaal were doing in 2009 and started to pilot in Namibia, Senegal and Laos with Vietnam starting soon.
  It is necessary to link both sets of indicators and put them together in one cohesive set which would be another contract for HTTG.
  The project would also include participating in country studies on piloting of policy indicators in combination with HTM impact indicators.
  The amount of funding needs to be determined.

- Reviewing, revising and updating the curriculum for ACEW workshops.
  The argument here for giving this contract to HTTG rather than IFMBE CED or ACCE directly is that medical physics needs to be addressed in the curriculum as well, so IUPESM and IOPM are to be also involved also.
  Amount of funding: $30-40K.