



Teaching Medical Skills

This is the Annual Report of **Petra van Pijkeren**, IFMSA Program Coordinator on Teaching Medical Skills for 2015-2016 Term. Written at July 1st, amended August 1st 2016 for the IFMSA August Meeting 2016.

Summary of Report:

This report summarizes the work of the Teaching Medical Skills (TMS) Program of the term 2015-2016. The initial part is dedicated to an overview of the year, then goes deeper into the Baseline Assessment, finishing with the Impact Report. In general, the year was successful in regards to the basis being made to enroll activities. The biggest achievement being the ongoing study on practical surgical in Medical Education Worldwide. The year has been challenging in regards to the Programs being in the establishing fase. This can be showcased by the baseline assessment identifying more than a 100 activities, whereas only 8 have successfully applied for the program so far. Therefore the impact could not be measured objectively. More details can be seen below.

Most important achievements:

- Established Candidature, Enrollment and Report form
- Creation of promotional materials and successfully worked on promotion of programs during MM16
- Coordination of Program Coordinators during MM16
- Capacity Building sessions at GA's
- Active in skills training the study on practical surgical in Medical Education Worldwide
- Presented Poster at the AMEE with preliminary results of the study
- Having activities enrolled and reported during this term into the Program
- Written the first Impact Report of this Program

Struggles encountered:

- Slow progress of the Program implementation → Focused on promotion and implementation
- Not having clear vision of work, changes in Programs and implementation structure
- Activity coordinators not filling out the Report Form
- Less than a month time to get into interim function and catch up on work → Putting time and effort into reading all mails of the previous year, attending all meetings and having close contact and great support from the previous coordinator
- Not many enrollments to make impact report → Mailed relevant activities personally

Recommendations for the next term(s):

- More activities need to be enrolled, so that there can be a benefit.
- Promote Programs with help from all involved and search for responsibility per NMO.
- Focus on the needs of the NMO's, so they can enroll their activities accordingly
- Make applying to the Program appealing or mandatory, so IFMSA reaches her mission.
- Show clear the benefit NMO's have from implementation and educate members on all steps needed to enroll their activities completely
- Conduct capacity building on project management and evaluation
- Focus on the needs of the activities such as capacity building, resources and connecting activities, so that there will be motivated activities to coordinate. Find the role of PC in this together with the Standing Committees and Trainings.



Baseline Assessment

Context

Program structure

Teaching Medical Skills Program is a Program that embraces all activities organized worldwide with one main goal - to increase competences of medical students as future doctors, providing them with opportunities to acquire appropriate knowledge, skills and attitudes.

Since the area of competences each aspiring physician should acquire in order to become a good doctor who will be able to provide good and efficient care to their patients and work efficiently as part of a team is wide, there has been numerous activities organized since the 2013-2014 term.

Considering the fact that activities are mostly organized and designed according to students' current needs, there has been lot more activities organized locally and on NMO level, rather than international level.

Since there is a strong collaboration among organization of non-formal education activities and efforts towards their recognition and implementation in medical schools curricula, IFMSA at the international level mostly works on the external representation, advocacy and meaningful students involvement, concentrating more on the Medical Education System area

There has been several transnational collaborations, mainly concentrated on research and structured surgical skills training.

As medical skills are fundamental to creation of competent and confident medical students, almost every NMO with SCOME established is working nationally and locally in the field of Teaching Medical Skills according to the NMO reports 2014 and 2015.

Through organizing courses, competency-based workshops, trainings and learning opportunities, NMOs try to actively involve in their education, creating opportunities that will bridge gaps in medical education they receive.

Description of program area(s)

Topics that IFMSA and NMOs were mainly working on during 2014-2015 are listed below:

- Clinical Skills
- Basic and Advanced Life Support, Emergency care
- Student involvement in Research and Science
- Communication with patients
- Professional competences
- New technologies and learning skills
- Interprofessional collaboration and teamwork
- Active involvement in non-formal education

Targeting criteria (how are participants selected)

Medical students are engaged in this program in two ways: Actively through capacity building, active involvement and organization of non-formal education activities, and Passively through participation in activities created for improvement of their knowledge, skills and attitudes.



Though major stakeholders of medical education, medical students are often passive, demotivated because of the gaps in their educational system, and not aware that they can create a change and design learning and practicing opportunities in all areas they are missing.

To assure quality and sustainability of the activities, medical faculties should be included in this program as well, through advocacy on support, non-formal educational activities recognition and medical skills programs implementation in medical curricula.

Approach

Questions that need to be answered

- What has been done in the past by IFMSA and the NMOs in the area of teaching medical skills?
- Assessment of existing surveys, transnational project reports, and reports of existing external partners.
- Which NMOs are already involved in this topic? And what kind of activities are held in this topic?
- Which NMOs want to be engaged in this topic? And why want they be involved?
- What do NMOs need for the program coordinator and the program team for support in existing activities and proposed activities?
- How many students have already been reached?
- Where can we, as IFMSA, work on in this topic with our external partners?
- How can we assure that skills and knowledge acquired are valuable? How can we measure whether skills have been significantly improved by activities organized or not?

Methods applied

- Review program proposal adopted in MM15.
- Review NMO reports MM15 and AM14.
- Review applications of NMOs applying for projects fair/activities fair competition at MM15 and AM14.
- Review MSIs from past three years on IFMSA website
- Review Policy Statements on IFMSA website relevant to the programme
- Analysis by both qualitative and quantitative methods.

List of other surveys conducted recently in the program area and/or on target population

There were several initiatives regarding areas of this program, but none of them was published.

At the moment two international studies are active:

1. Research Integrity in Medical Student Curricula
2. Practical surgical skills training in medical education worldwide – students' perception/experience



Analysis

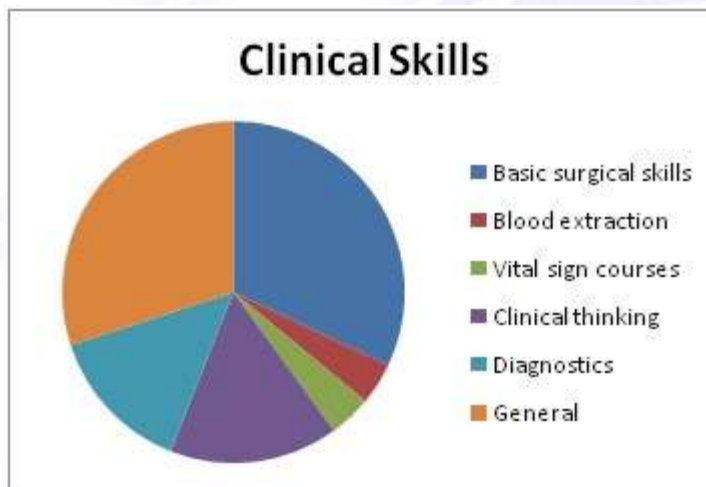
Topics that IFMSA and NMOs were working on during 2014-2015 Topics

1. Clinical skills

Number of NMOs involved: 41

Focus on specific topics, such as:

- basic surgical skills
- blood extraction
- vital sign courses
- clinical thinking
- diagnostics
- clinical skills training in general

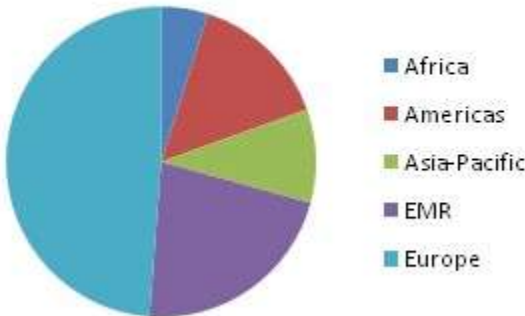


Geographical zones (Proportion of NMOs in different regions)

- Africa: 2
- Americas: 6
- Asia-Pacific: 4
- EMR: 9
- Europe: 20



Regional Distribution



Regional Distribution:

Europe has the the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, training, course, project, competition

2. Basic and Advanced Life Support, Emergency care

Number of NMOs involved: 21

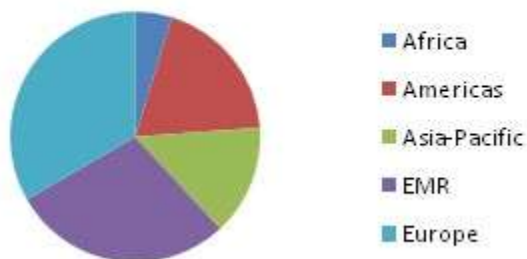
Focus on specific topics, such as:

- Basic and Advanced Life Support
- First Aid and Emergency Training
- Triage Course

Geographical zones (Proportion of NMOs in different regions)

- o Africa: 1
- o Americas: 4
- o Asia-Pacific: 3
- o EMR: 6
- o Europe: 7

Regional Distribution



Regional Distribution:

EMR and Europe have the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, training, course



3. Student involvement in Research and Science

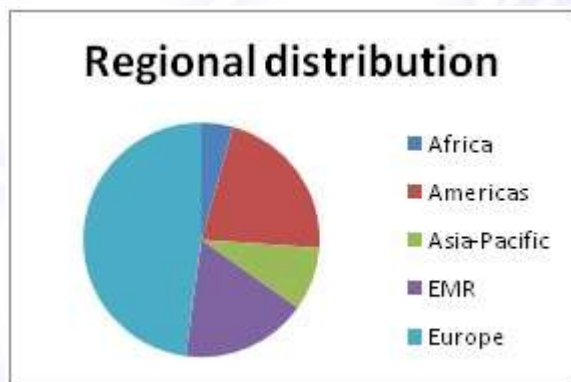
Number of NMOs involved: 23

Focus on specific topics, such as:

- research methodology
- scientific methods
- promotion of research and science among students

Geographical zones (Proportion of NMOs in different regions)

- Africa: 1
- Americas: 5
- Asia-Pacific: 2
- EMR: 4
- Europe: 11



Regional Distribution:

Europe has the highest number of NMO participating

Participation population: Without quantitative data recorded

Target groups: General medical students

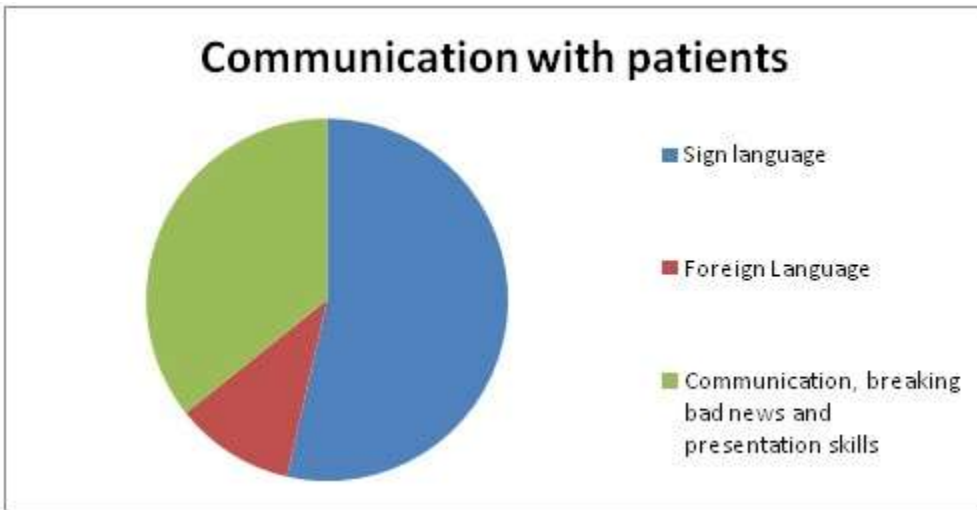
Type of activities: workshop, lectures, course, Medi Cafe

4. Communication with patients

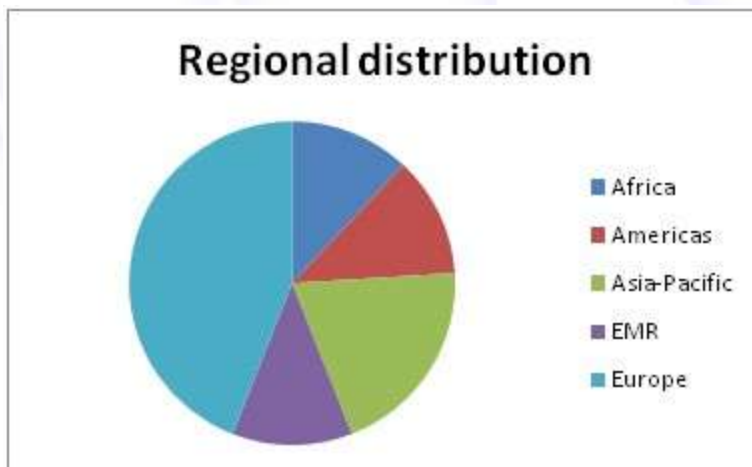
Number of NMOs involved: 25

Focus on specific topics, such as:

- Sign language
- Learning foreign language
- Communication, breaking bad news and presentation skills



- Geographical zones (Proportion of NMOs in different regions)
 - Africa: 3
 - Americas: 3
 - Asia-Pacific: 5
 - EMR: 3
 - Europe: 11



Regional Distribution:

Europe has the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, course

5. Professional competences

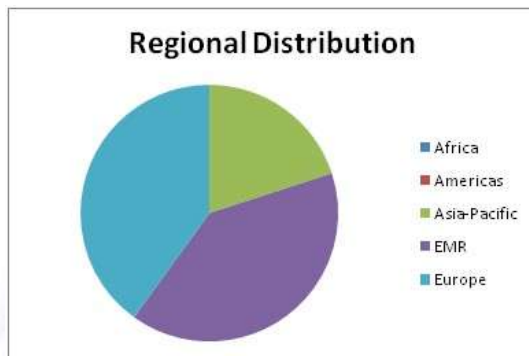
Number of NMOs involved: 5

Focus on specific topics, such as:

- USMLE Lectures
- Interview
- Motivation Letter and CV writing



- Geographical zones (Proportion of NMOs in different regions)
 - Africa: 0
 - Americas: 0
 - Asia-Pacific: 1
 - EMR: 2
 - Europe: 2



Regional Distribution:

EMR and Europe have the highest number of NMO participating in this area of program, while Africa and Asia-Pacific have none.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, course

6. New technologies and learning skills

Number of NMOs involved: 13

Focus on specific topics, such as:

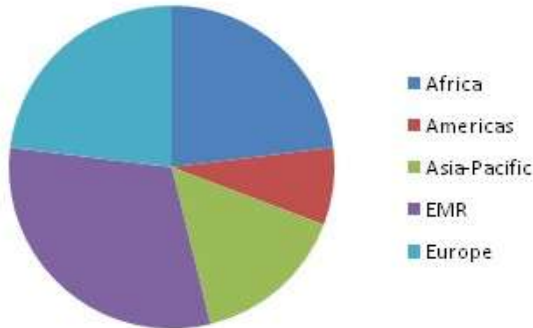
- Informatics and New Technology Courses
- Learning methodologies and skills
- Financial resources management

Geographical zones (Proportion of NMOs in different regions)

- Africa: 3
- Americas: 1
- Asia-Pacific: 2
- EMR: 4
- Europe: 3



Regional Distribution



Regional Distribution:

EMR has the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, course

7. Interprofessional collaboration and teamwork

Number of NMOs involved: 4

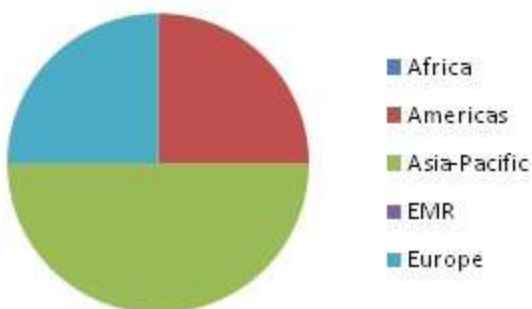
Focus on specific topics, such as:

- Interprofessional collaboration
- Working in a medical team

Geographical zones (Proportion of NMOs in different regions)

- Africa: 0
- Americas: 1
- Asia-Pacific: 2
- EMR: 0
- Europe: 1

Regional Distribution



Regional Distribution:

Asia-Pacific has the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, course



8. Active involvement in non-formal education

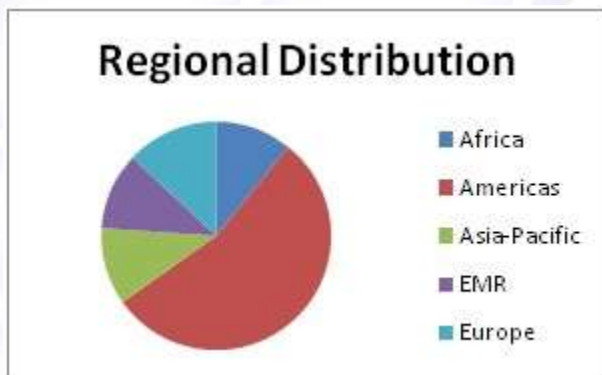
Number of NMOs involved: 13

Focus on specific topics, such as:

- Peer Education
- Pre-departure trainings
- Trainings in projects writing
- Support and training for non-formal education activities organization

Geographical zones (Proportion of NMOs in different regions)

- Africa: 1
- Americas: 5
- Asia-Pacific: 1
- EMR: 1
- Europe: 5



Regional Distribution:

Americas have the highest number of NMO participating in this area of program.

Participation population: Without quantitative data recorded

Target groups: General medical students

Type of activities: workshop, course

Recognized projects

- **Transnational projects:**

1. Research Workshop (LeMSIC-Lebanon, AMSB-Bulgaria)

Research workshop is a transnational project aiming to fill the gaps in medical education regarding research in general. Workshops will give the students the necessary tools to help them grow in the field of research.

The main objective:

Empowerment of students into being better conductors and consumers of research.

Aims to improve the knowledge of medical students about the research process while providing them with opportunities to start working on their own project.



Expected outcome:

At the end of the workshops, students are expected to be able to engage successfully in research activities. The workshops provide the basic tools on which the students can rely in their future activities in research

Moreover, during the workshops, students elaborate their research questions with the help of their peers and the monitoring of course coordinator. By the end of the workshops, a proposal is expected from each student regarding a question of interest.

2. Surgical Suturing ComBaT (CroMSIC, IFMSA CZ)

Transnational project, aiming to provide an intensive co-curricular supplement providing competency-based education and training for medical students during their undergraduate studies, by promoting the science, research and art of surgery in order to improve the standards of surgical practice and empower future physicians in our communities.

Main objective:

to provide an intensive co-curricular supplement providing competency-based education and training for medical students during their undergraduate studies,

Objectives:

Empower and support medical students in improving and building their surgical skills

Provide medical students with the opportunity to gain and improve their theoretical knowledge and increase medical students' practical skills

Develop a coherent learning/teaching environment between medical students and tutors



Publications

- MSI 31: EMSS – United Arab Emirates 'Teach Me Medicine'
Project that is a mixture of basic, clinical and correlative medical information, proposes ways to be more expressive and innovative in education and learning.
- MSI 31: TurkMSIC – Turkey 'Voice of Hands'
Project aimed to improve communication with hearing impaired patients.
- MSI 31: IFMSA – Brazil 'Dying: A Different Sunset'
Project aimed to prepare future healthcare professionals for the experience of death in their profession
- MSI 31: IFMSA - Iraq: 'Medicine is Fun'
Campaign aimed to show positive and fun ways of learning
- MSI 31: FASMR – Romania: 'Breaking the Silence'
A Sign Language project, teaching medical students how to communicate with deaf patients
- MSI 27: HelMSIC-Greece: 'Transnational project: Breaking the Silence'
- MSI 27: CIMSA – Indonesia 'Indonesian Medical Olympiad'
Competition on range of knowledge and skills
- MSI 27 IFMSA – Jordan 'Breaking Bad News'
Trainings in communication skills and techniques in breaking bad news

Institutional arrangements

Considering the fact that activities are mostly concentrated on the local and national level, most of the collaboration noticed were done locally, mostly with leading experts in the area. Several collaboration were done with hospitals, research centers, and institutions such as Red Cross. There is lot more space for collaboration in this field.

Overview

Main goal and expected impact

As mentioned before main goal of Teaching Medical Skills program is to improve the competences of the future doctors by improving their practical skills, so they can fit the needs of their societies and provide good and efficient care to their patients.

In order to reach that goal it is necessary to work on organization of non-formal educational activities in every NMO, starting from baseline assessment of current situation in medical schools and designing of trainings regarding current students' needs, and providing NMOs with support by providing them with materials and teaching students involved how to organize competency-based trainings. It is important to simultaneously work on advocacy towards the faculties, to assure sustainability and recognition of non-formal education activities, and to conduct regular assessment of all activities that can be used as a tool in advocacy on well-structured medical skills programs implementation in medical curricula.



Outcome 1: Students provided with opportunities of learning and practicing medical skills through variety of workshops and trainings

What we have now:

- Numerous activities have been organized, regarding certain students' needs and gaps students encounter in their education. Activities can be divided in 5 different groups: Clinical skills, Emergency care and First aid, Research skills, New technologies and learning skills and Professional competences.
- Highest number of NMOs organize activities in field of Clinical Skills.
- The IFMSA working group on Global Surgery is working actively since August 2013. on global access to surgery, through international collaboration with several institutions, research on the topic and raising awareness among medical students through campaigns, workshops, lectures etc.
- International study on Practical Surgical Skills Education arose from Transnational Project Surgical Suturing ComBaT, aiming to explore the exposure and satisfaction with practical skills teaching programs in medical curricula worldwide.

Targets:

- Lack of data describing the number and age of participants is the situation that should be highly noticed by all activity coordinators. All medical students should be informed and provided with opportunities for regular participation in non-formal education activities.
- More activities should be organized in Africa and Asia-Pacific. [Achievement expected regarding indicators] Assessment of all activities should be done and include feedback from participants. Results should be measurable whether in quantitative or qualitative methods, and thus the design, implementation and evaluation of workshop or training should be well-organized.
- Templates of report should be designed based on baseline assessment and indicators of program, and especially include the scale, frequency, and number of participants of activity. Better communication with NMOs should be established, in order to receive feedback on their specific needs and help, and include them in annual plan of the program development.

Outcome 2: Students provided with regular opportunities for self-assessment of skills and competences acquired during regular clinical courses and possibility to express their needs when it comes to specific clinical skills education

What we have now:

- Only four initiatives arose with this goal:
 - Clinical Rotation Quality Check form (FUMSA-Uganda)
 - Developing medical competences (CroMSIC Croatia)
 - Conditions of the Portuguese Medical Schools (PorMSIC)
 - Evaluation of teaching hospital process (AEM - Burkina Faso)

Targets:

Design a specific Quality Check Form that could be used by all NMOs and conduct regular, twice a year, research among medical students, in order to define annual plan of activities in line with current students' needs.



Outcome 3: Students provided with tools such as trainings on communication skills, basic medical sign language etc., to help them handle different approach to range of patients, keeping in mind their cultural differences or possible disabilities

What we have now:

- 25 NMO organize regular activities aimed to improve communication with patients, especially patients with disabilities.
- Majority of the activities is focused on Sign Language, highlighting the need for improvement communication with hearing impaired patients.

Target:

- Assess all the activities done using real-life simulations and OSCEs in order to assure quality and benefit for the patients

Outcome 4: Competency-based workshops and trainings recognized and supported by medical school

What we have now:

- Core competencies for curricula – Qualitative survey done by IFMSA-Canada, and was accepted of for presentation at the Canadian Conference on Medical Education at which point there will be a call for medical schools in Canada to endorse the peer-reviewed list of competencies.

Target:

- Advocacy towards medical schools on support whether that support is provided by teachers' help with delivering and quality assurance, or provided materials, funding and other necessary resources.
- Assure assessment of all activities is done regularly and use data conducted for the advocacy on integration of medical skills teaching programs in curricula.

Summary

Teaching Medical Skills Program is a Program that embraces all activities organized worldwide with one main goal - to increase competences of medical students as future doctors, providing them with opportunities to acquire appropriate knowledge, skills and attitudes.

Since the area of competences each aspiring physician should acquire in order to become a good doctor who will be able to provide good and efficient care to their patients and work efficiently as part of a team is wide, there has been numerous activities organized since the 2013-2014 term.

Activities have been mostly organized on local and national level, rather than international, and focused on several areas: Clinical Skills, First Aid and Emergency Care, Research, Communication with patients, Professional competences, New technologies and learning skills, Interprofessional collaboration and teamwork and Active involvement in non-formal education.



As medical skills are fundamental to creation of competent and confident medical students, almost every NMO with SCOME established is working nationally and locally in the field of Teaching Medical Skills according to the NMO reports 2014 and 2015

Taking in consideration analysis made we can conclude that area of teaching medical skills is wide, involving all the activities that work towards improvement of medical students competences, whether the ones focused on student himself, or the ones related to his work with patients or other health professionals.

Considering number of NMOs interested in topics of this program, activities, outcomes and target groups we can qualitatively conclude that this program has a solid basis, although immeasurable, and possible major impact on medical education.

Through development of the upcoming NMOs reporting system and empowering NMOs with the appropriate tools and skills to regularly evaluate all organized activities, we will be able to measure the end term impact semi quantitatively.

Through organizing courses, competency-based workshops, trainings and learning opportunities, NMOs try to actively involve in their education, creating opportunities that will bridge gaps in medical education they receive.



Program Impact Report

Program Structure

Despite the fact that curricula contain different educational programs which should provide each aspiring physician to acquire the appropriate knowledge, skills and attitudes, students often feel they are not competent enough when it comes to clinical skills, due to deficiency of clinical practice in regular clinical courses or unspecified and unstructured soft skills education.

To tackle this problem, this program aims to achieve ultimate goal of increasing competency in future physicians by organizing regular learning opportunities – competency-based workshops and trainings, and through that opportunities increase both knowledge and competences of students practical and soft skills.

Although most effort is put on development of high-quality practical skills courses, capacity building and quality assurance, simultaneously should be worked on advocacy towards medical schools as well, and work on recognition of competency-based workshops and trainings, its implementation in curriculum, and advocate on support from faculty members regarding funding, resources, quality assurance and teaching.

Main Goal and Expected Outcomes

Main Goal

We aim to improve the competences of the future doctors by improving their practical skills, so they can fit the needs of their societies and provide good and efficient care to their patients.

Outcome 1: Students provided with opportunities of learning and practicing practical medical skills through competency-based workshops and trainings

Indicator: number and frequency of non-formal education activities

Population: medical students

Threshold: regular trainings and workshops maintenance

Outcome 2: Quality of competency-based courses assured

Indicator: amount and quality of skills acquired by students, results of post-assessment done by educators

Population: medical students, professionals involved in delivering

Threshold: pass on OSCEs or written and practical skills exam given after attendance at courses, increased results on skills self-assessment done after attendance by comparison with the one done before, positive results on post-assessment done by teachers or peer educators

Outcome 3: Students provided with regular opportunities for self-assessment of skills and competences acquired during regular clinical courses and possibility to express their needs when it comes to specific clinical skills education

Indicator: frequency of evaluation opportunities

Population: medical students

Threshold: regular questionnaires at the beginning of every school year

Outcome 4: Students provided with opportunities to involve in creating and delivering of medical skills trainings and workshops in their medical schools

Indicator: students involvement and motivation

Population: medical students

Threshold: increased number of students involved in program, regular activities development and progress

Outcome 5: Support provided for all NMOs and medical schools who organize competency-based trainings and workshops by providing them with materials and teaching students involved how to organize peer-to-peer competency-based trainings

Indicator: number of NMOs and medical schools involved, number of medical students going through education, number of materials created

Population: medical students



Threshold: increased number of NMOs and medical schools involved in program, regular maintenance of educations organized for new peer educators and students involved, sufficient number of materials created according to current needs

Outcome 6: Students provided with tools such as trainings on communication skills, basic medical sign language etc., to help them handle different approach to range of patients, keeping in mind their cultural differences or possible disabilities

Indicator: improved communication skills with patients

Population: medical students

Threshold: pass the OSCEs given after attendance (real-life situations simulation with range of patients)

Outcome 7: Well-structured competency-based trainings and workshops integrated into the curriculum

Indicator: change of curriculum

Population: medical school

Threshold: well-structured medical skills activities integrated in medical school curriculum as regular course

Outcome 8: Students provided with competences and knowledge needed for reacting in adequate manner in emergencies through regular Basic and Advanced Life Support workshops and Emergency Care Trainings

Indicator: students knowledge and ability to react in adequate manner in emergencies and life-threatening situations

Population: medical students

Threshold: pass on OSCEs on emergency care and Basic and Advanced Life Support given after attendance

Outcome 9: Competency-based workshops and trainings recognized and supported by medical school

Indicator: medical schools acknowledgment of quality and support

Population: medical school

Threshold: Medical skills trainings as elective course in medical school, ECTS points provided for attendance at courses, workshops and trainings provided with necessary materials, rooming, funding and support in teaching and quality assurance

Program Areas

Enrolled 2015-2016

The enrolled activities all work on the field of education among specific societal groups. None of them have in their objectives to work in the areas of advocacy, campaigning, research, fundraising for 3rd parties or operative work.

Not enrolled 2015-2016

There is one prominent not enrolled activity that works in the field of research, namely the study on practical surgical skills training in Medical Education

Worldwide by IFMSA. Furthermore there are several activities that applied for the Activities Fair and that are in the MSI that NMO's did not enroll.

Questions To Be Answered

- What has been done in NMOs during this year based on the topic of the Program?
- What are the main obstacles which the activity coordinators have encountered?
- Which areas of the Program are covered in which extend?
- Which Regions have been the most active in terms of Program enrollment?
- What is the reach of the specific activities?
- How are the target groups divided among the activities

Program Annual Report 2015-2016 Term

Indicators

- Type of evaluation used
- Objectives and indicators of success
- Statistical data(numbers of participants, results of the evaluation, questionnaire results)

Summary of Statistics

This term a total of 8 activities were enrolled in the program. 5 of these activities have been done and waiting the report form to be filled by the respective NMOs and activity coordinators. 3 of these activities are still ongoing. This term 5 activities were from the European Region, 2 from the Americas Region and 1 from the Asia-Pacific Region. All activities gave education among specific societal groups.

Conclusions

NMOs have been putting efforts to increase competences of medical students as future doctors, providing them with opportunities to acquire appropriate knowledge, skills and attitudes. This shows NMOs understand the importance and relevance of the program's area. Yet, not enough activities have been enrolled and reported in the program to give any objective conclusions towards the impact of IFMSA in the field of the Teaching Medical Skills Program.

Final words

I would like to thank my predecessor Katarina Mandic for her wonderful job the last year. She has done the most of work this year. Furthermore I would like to thank our Vice-President for Activities Petar, his assistant Maria and the SCOME Director Angel for the warm welcome and support as interim.

Annex 1: List of enrolled activities

Name of Activity	Type of Activity	NMO's involved
Hypertension, a silent enemy	Education among specific societal groups	AEMPPI-Ecuador
An angel for the end	Education among specific societal groups	AEMPPI-Ecuador
First National Surgery Summer School	Education among specific societal groups	IFMSA-Poland
First National Multidisciplinary Surgical Conference for Students and Interns	Education among specific societal groups	IFMSA-Poland
Polish in Medicine	Education among specific societal groups	IFMSA-Poland
How to save a life	Education among specific societal groups	CroMSIC
Doc-Doc	Education among specific societal groups	IFMSA-Pakistan
Winterschook/Summerschool Stolzalpe	Education among specific societal groups	AMSA Austria