Report on the Final Evaluation of "National Standard for Physiotherapy and Occupational Therapy Education Project" 2010-2013

Lowana L. Lee

# **Table of Content**

# **Executive Summary**

## **Evaluation Team**

- 1. Name of the program
  - 1.1 Authors(s)
  - 1.2 Contact information

# 2. Context of the program

- 2.1 Origins and history of the program
- 2.2 Organizational chart
- 2.3 Service delivery partners
- 2.4 Relevant legislation, laws or regulations impacting the program
- 2.5 Other relevant contextual factors

# 3. Rationale of the program

- 3.1 Major needs or problems addressed by the program
- 3.2 Program response to the needs or problems
- 3.3 Individuals served by the program

# 4. Program mission, vision, and major goals

- 4.1 Mission
- 4.2 Vision
- 4.3 Goals

## 5. Purpose and specific objectives for the final evaluation

- 6. Methodology
- 7. Assessment Schedule

# 8. Evaluation Questions, Indicators of attainment and Findings

- 8.1 Development goal
- 8.2 Project Objective
- 8.3 Project Sub Goal 1
- 8.4 Project Sub Goal 2
- 8.5 Project Effectiveness
- 8.6 Project Impact

- 8.7 Project Relevance
- 8.8 Sustainability
- 8.9 Project Efficiency

# 9. Suggestions

# 10. Recommendation and conclusion

# 11. Appendices

Appendix A: ReferencesAppendix B: Logic ModelAppendix C: Abbreviations

Appendix D: Demographic Information on focus groups and structural interviews

**Appendix E: Acknowledgement to Project participants** 

# **Executive Summary**

The final version of the book "Guidelines for OT and PT education" was completed in 2013 in cooperation with World Confederation for Physical Therapists (WCPT) and World Federation for Occupational Therapists (WFOT) and the Chinese Association of Rehabilitation Medicine (CARM) in Nanjing. Three universities and 100 teachers have been selected to be pilot users of the guidelines. Trainings have been given to them in how to use the book to create international standard university specific curriculums for the education of PT and OT in China. The teachers were also provided with training (on-line and face-to-face) in teaching physical therapy and occupational therapy courses. This final evaluation is the evaluation of the NMA project on establishing guidelines for PT & OT education and facilitating a national standard for the curriculums. The on-site evaluation relates to whether the guidelines had been used in the curriculum planning for the three pilot universities. Moreover, the impact of the guidelines have on the education of physical and occupational therapists in the nation and subsequent service delivery to the clients were assessed through focus groups with the participants.

Findings on site visits agreed that the "Guidelines for PT and OT Education" were utilized by at least three universities in piloting a new curriculum for the training of physical therapists and occupational therapists. The new guidelines were aimed at supporting a new standard for a national wide curriculum that would meet the minimal standard of WCPT and WFOT. The feedback received was generally positive from national rehabilitation leaders, universities leaders, faculties and students during on-site field visits in November, 2013 to the three universities. All agreed that the guidelines have an impact in the new curriculum. To equip the trainers, on-line training courses in PT and OT were given to the prospective teachers. The shortage of qualified teachers trained in physical therapy or occupational therapy are still acute. Appropriate clinical settings with qualified preceptors will need to accommodate student internship, and pediatric placements and psychosocial occupational therapy placements needs to be in place to complement the new curriculums. In order to support the new curriculum, certain resources need to be put into place.

Of commendation are the enthusiasm and energy that all the partners put into the project. There were mutual support, both in finances and resources sharing. All three pilot universities were working on the recommendations made by the midterm evaluation team after the site visits. Though the minimal standards by WCPT and WFOT requirement stilled need to be worked on, the three universities were hopeful that accreditation would occur by 2015. The students of the new curriculum were also hopeful that they would be able to find employment in the rehabilitation field either as qualified physical therapists or occupational therapists. Certainly the day will come when the two professions will be recognized as valued components in rehabilitation with well established physical therapy and occupational therapy schools. There is no doubt that this project had made a positive impact on rehabilitation education in China.

#### **Members of the Evaluation Team**

Lowana L. LEE Assistant Clinical Professor School of Rehabilitation Science McMaster University, Hamilton ON Canada

Occupational Therapist McMaster Children's Hospital Hamilton Health Sciences, ON Canada

Patrick HE Hongchen, M.D.
Deputy Director
Department of Rehabilitation Medicine
West China Hospital, Sichuan University

(Both members of the evaluation team are independent evaluators and are not involved in any aspects, including the implementation of the project.)

#### The Report

**1. Name of the program:** Report on the Final Evaluation of "National Standard for Physiotherapy and Occupational Therapy Education Project" 2010-2013

1.1 Author: Lowana L. LEE

#### 2. Context of the program

2.1 Origins and history of the program

The Norwegian Mission Alliance (NMA) has been working with disabled people in China for many years. Since 2004, NMA has had a community based rehabilitation project for children in Sichuan. This was a collaborative project between the Norwegian Mission Alliance and the Sichuan Disabled Person's Federation (SDPF) that ended in 2008. The experience gained through this project led to an invitation from the China Disabled Peoples Federation (CDPF) to continue working with them on a national level.

In 2009, a new 5-year project was started with funds from the Norwegian government. The project, "Holistic Habilitation for Children with Cerebral Palsy" (HH), has the focus of supporting the development of a more holistic habilitation program on a higher level in China instead of supporting a few community based rehabilitation stations. The development goal for this project was to" improve the situation for the disabled children in China where they are met with respect and dignity". To achieve this, the project was separated into two subprojects with the following sub goals:

- 1. to support the development of a national curriculum for physiotherapy (PT) and occupational therapy (OT) according to an international standard;
- 2. to develop a model for local based habilitation of CP children that is suitable for China. This includes establishing the use of such a model in Beijing, Yunnan and Sichuan Province. Services are to be provided for the children and their closest relatives, based on a professional assessment, and are given a holistic follow-up by competent local health personnel, rehab staff within the CDPF and local teachers.

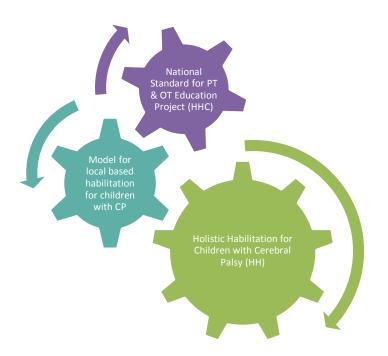
In the course of developing the holistic approach of service for children with cerebral palsy, it was also recognized that there is a tremendous need for qualified physical and occupational therapists to work with the clients and their families. Since the present training of therapists are of varying standards and levels in the country, a recommendation had been made in 2010 to target training of physical therapists and occupational therapists following World Confederation for Physical Therapists (WCPT) and World Federation of Occupational Therapists (WFOT) standards.

The present final evaluation concerns the work done around the first objective and is recognized under the education project (HHC) of "National Standard for Physiotherapy and Occupational Therapy." A baseline evaluation on rehabilitation education in China had been documented (Wang, 2010). As a result of the evaluations by domestic and international evaluators, one of the subgoals of the project was to develop a booklet on the guidelines for OT and PT education to assist in the development of the curriculum for OT and PT that will help meet international standards. With the help of CARM, the final version was published in July of 2013 after many drafts and revisions.

The final version of the book" Guidelines for OT and PT education" was completed in 2013 in cooperation with World Confederation for Physical Therapists (WCPT) and World Federation of Occupational Therapists (WFOT) and the Chinese Association of Rehabilitation Medicine (CARM) in Nanjing. Three universities and 100 teachers have been selected to be pilot users of the guidelines. Trainings have been given to them in how to use the book to create international standard university specific curriculums for the education of PT and OT in China.

The purpose of the present evaluation is foremost to evaluate if the project has reached the development goal, project goal/objective and sub goals for this part of the project. Furthermore, the evaluation would assess the relevance of current guidelines for the Chinese education system and to identify challenges that lies ahead in the implementation of the guidelines. The evaluation would also give an indication of the sustainability and continuation of using the guidelines for the PT & OT curriculum to follow international standards.

# 2.2 Schematic chart for relationships of the projects funded under NMA



# 2.3 Service delivery partners

The partners involved in this project are the Norwegian Mission Alliance, the Chinese Association of Rehabilitation Medicine (CARM) with the support of World Confederation for Physical Therapists (WCPT) and World Federation of Occupational Therapists (WFOT). Three universities: Nanjing Medical University, Nan Tong University and Shanghai Traditional Chinese Medicine University with their teachers and students participated in the pilot project. The book "Guidelines for OT and PT education" published July 2013 became the framework for the development of the PT and OT curriculum in all three universities.

# 2.4 Relevant legislation or policy impacting the program

According to the Law of the People's Republic of China on the Protection of Persons with Disabilities, in Chapter 2, Article 13: the local government is encouraged to set up medical rehabilitation departments in hospitals:

"Local People's governments at various levels and relevant departments shall, in accordance with practical need, establish in a planned way medical rehabilitation departments (sections) in hospitals, set up rehabilitation institutions for persons with disabilities, and provide medical rehabilitation services, offer personnel training and technical guidance, and carry out scientific research."

These rehabilitation departments are in addition to the community based rehabilitation stations and institutions that are functioning in different parts of the provinces. Therefore the need for trained and qualified personnel to deliver rehabilitation services is in great demand.

#### 2.5 Other relevant contextual factors

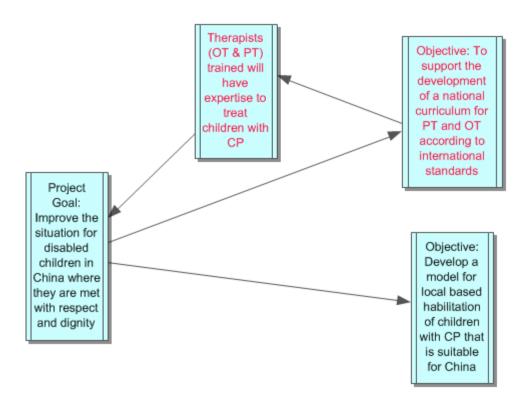
Traditionally, rehabilitation personnel are trained in institutions that varied from medical colleges in universities to colleges of traditional Chinese medicine, sports academies, vocational and technical colleges. The training is not standardized and different institutions may adopt different curriculums (Wang, 2010). To compound the issue, almost all the curriculum provides training for rehabilitation therapists and as such, the central government recognizes the diploma of rehabilitation therapists. It is a big milestone to have the separation of the two disciplines (occupational therapy and physical therapy) in training. The three pilot universities are still working on what degrees to confer when the students graduate as the government did not have OT or PT in the education system yet. Rehabilitation using western methods is a relative young field, and it was not easy for the general public to understand the role of physical therapist and occupational therapist, or distinguish the differences between the two disciplines. Traditionally, the use of physical modalities and acupuncture are the backbone of the traditional medicine in pain relief and "rehabilitation".

#### 3. Rationale of the evaluation

#### 3.1 Major needs or problems addressed by the evaluation

The main needs or problems addressed by this evaluation are centered on whether the "Guidelines for OT and PT education" is used by at least three universities in the country for curriculum planning; and that through the new curriculum, the students and the teachers were satisfied with the new teaching content. A secondary goal is to ensure that there are also suggestions for improvement as the curriculum guide is being continuously used. In some ways, the meetings and focus groups were also open forums for the leaders, teachers and students to give input to the whole process of revamping the existing curriculum. The ultimate goal is that the therapists trained will be of international caliber as the pilot universities also plan to apply for recognition from WCPT and WFOT.

## 3.2 Program response to the needs or problems



# 3.3 Individuals served by the program

The ultimate clients served by the project are the children with cerebral palsy and their families. In the progress of setting the national guidelines for new curriculum for the training of occupational therapists and physical therapists, the prospective students of both disciplines will have benefits. The long term effect will enable universities that adopt curriculum of international standards to be recognized by the World Confederation for Physical Therapists and the World Federation of Occupational Therapists. Many students as well as faculty members also expressed hopes that there would be international exchange between China and overseas WFOT and WCPT recognized schools. Graduates also looked forward to the possibility that they would be able to work in WFOT and WCPT overseas member countries.

#### 4. Evaluation Team mission, vision, and goals

#### 4.1 Mission -

The mission of the evaluation team was to find out the extent the curriculum guidelines being used. The team also would evaluate the process of implementation of the guidelines and the need for changes. Recommendations for the future and the sustainability of the program will also be discussed as this is the last year that NMA and the Norwegian government would be funding the program.

#### 4.2 Vision -

It is hoped that this final evaluation will point to the future direction of rehabilitation education in China given the present diversity and different levels of training that the rehabilitation personnel receives. It is the hope of many interviewed rehabilitation leaders,

university leaders, faculty members and students that the Chinese schools would be recognized by WCPT & WFOT.

#### 4.3 Goals -

The final evaluation consists of gathering data in the field in late November, 2013 through site visits to Nanjing Medical University, Nan Tong University and Shanghai Traditional Chinese Medicine University. These include meetings and semi-structured interviews with leaders, faculty members and students. CARM leaders and leaders of both expert panels were also interviewed to get their perspectives after the implementation of the guidelines. Using modern technology through Skype, the expert panel leaders were interviewed formally as they were located in different parts of China and were unable to meet the team in November in Nanjing/Shanghai.

# 5. Purpose and specific objectives for the final evaluation

The purpose of the evaluation is to assess how successful and to what extent that the "Guidelines for OT and PT education" booklet had been adopted by the three universities in the planning of the curriculum. The long term effectiveness may not be immediately evident, but preliminary assessment should be available. The continuation and sustainability of the project will also be discussed.

Therefore the specific objective:

In line with the stated objective of the first sub-project: "To support the development of a national curriculum for Physiotherapy (PT) and Occupational Therapy (OT) according to an international standard" - the specific objective of this final evaluation: by the end of 2013, the evaluation team will have interviewed the participating partners to assess the effectiveness of the "Guidelines for OT and PT education"

# 6. Methodology employed:

Evaluation methodology includes inspection of relevant documents, onsite evaluations, structured interviews with leaders, focus groups and structured interviews with students and faculties from the three pilot universities. The leaders and faculty heads from the three universities also gave an overview of their present situation and achievements in setting up the new curriculum. The leader of CARM and the project manager were also interviewed including structured interviews with the leaders in the OT and PT expert panels over Skype conference meetings with the evaluation team.

#### 7. Assessment Schedule

Focus groups, structured interviews held with leaders, faculty members and students of 3 pilot universities:

- Nanjing Medical University- November 18-19, 2013
- Nantong University November 20, 2013
- Shanghai Traditional Chinese Medicine University- November 21, 2013

Interview with CARM leader - November 18, 2013
Skype meeting with leader in OT expert Panel - Dec 11, 2013
Skype meeting with leader in PT expert Panel - Dec 11, 2013
Interview with project manager of Buer Consult AS - November 19, 2013

#### 8. Evaluation Questions, Indicators of attainment and Findings

**8.1. Development goal:** "An improved situation for the disabled children in China where they are met with respect and dignity".

**Indicator Questions:** 

- 8.1.1. In what way has the project already improved the situation for disabled children in China?
- 8.1.2. In what way can the project in the future benefit the disabled children in China?

Both questions were asked of all the interested partners (universities leaders, teachers, and students, leaders of CARM and expert panels of both disciplines). All agreed that there was no immediate effect seen yet as the students undergoing the new curriculum had not yet graduated. However all were hopeful that with the new training of the students under the new curriculum, there will be a more systematic approach and understanding of the management of disabled children in the local community. It is also expected that the new graduates will be employed in local hospitals and communities. All respondents were upbeat and hopeful that the quality of rehabilitation and caliber of the graduates will improve under the new curriculum.

In Nanjing, teachers in the focus groups had pointed out that the central government now has funding for children with cerebral palsy from 0-6 years old. A noted phenomenon is the increase of children seeking treatment at Nanjing Children's Hospital and orphanages in Nanjing operated under the Welfare Department. The teachers believed that when their students graduate and if they work in these settings, the children with cerebral palsy will definitely benefit from the increased expertise.

**8.2.Project Objective:** "To support the development of a national curriculum for Physiotherapy (PT) and Occupational Therapy (OT) according to an international standard".

#### **Indicator Questions:**

- 8.2.1. In what way is the guideline made according to international standards?
- 8.2.2. Assess the relevance of the guidelines into the Chinese education system.
- 8.2.3. What needs to be done to achieve a national usage of the guidelines?

## History of the Guidelines

Dr Li Jian An & Wang Hong Xing (2013) presented to the evaluation team the history and background that led to the present publication of the guideline and the implementation of the guideline in the project at Nanjing Medical University. Before the guidelines came into publication in July 2013, meetings had been held with the leaders at CARM, WFOT and WCPT as early as 2010. At that time, it was recognized that the schools offering PT, OT and Rehabilitation education had exponentially increased. A proposal was made for the need to standardize the curriculum for the training of the physical therapist and the occupational therapist. It was also noted that the training of the

two disciplines was not separated and most schools were training rehabilitation therapists. By the summer of 2010, a panel of international and domestic experts in OT and PT was struck. These experts were leaders in their respective field on an international as well as national level the country. They met together in Kunming and then in Chengdu in 2011 and 2012 respectively before the draft of the manuscript were drawn in September 2012. By September 2012, three pilot universities had been selected to participate in the project. A mid-term evaluation was done in November 2012 headed by international experts with domestic experts from the two disciplines. Recommendations were given to the three universities as they continued with the project (NMA, 2012).

As seen from the panel of experts that contribute to the published guidelines, they are leaders in their own discipline from all over the world (Zhou & Li, 2013). The guidelines explicitly stated that they referenced documents from the World Confederation for Physical Therapy (2011) and World Federation of Occupational Therapists (2002). There is no doubt that this expert panel of members from overseas and China had made every effort to ensure that the curriculum guidelines are up to international standards. Many meetings and discussions had taken place before the final version of the manuscript was sent to the publisher. Many national rehabilitation leaders agreed that the curriculum can be the foundation for the national curriculum for occupational therapists and physical therapists.

The guidelines emphasized contextualization (WCPT, 2011 & WFOT, 2002). During the focus groups with CARM and school leaders, teachers and students, they all agreed that contextualization is important. The pilot universities were allowed to adapt the curriculum to suit the local needs and the school's characteristics and uniqueness. As in the Shanghai Traditional Chinese Medicine University, subjects on traditional Chinese medicine were taught alongside with western rehabilitation medicine subjects while balancing instruction hours in subjects that are part of the minimal standards of WCPT and WFOT. On reviewing the guidelines, it does allow for flexibility for adaptation and at the same time maintaining the minimal international standards required.

In order for the guidelines to be adopted nationally, a lot of work had been done by CARM headed by Dr. Li Jian An. It is understood that CARM is a great force and partner in the project. CARM has the caliber to reach the national and government level. CARM and the leaders of the expert panels had taken the lead in negotiating with Education Department. According to the PowerPoint presentation by Dr. Wang Hong Xing (2013), CARM has been active in helping with education standards; participate in the education committee and teachers training and supporting the pilot universities in using the curriculum. It would not be surprising that in order for the curriculum to take root, national stakeholders and agencies would have to advocate and influence the policy makers in the central government. In fact, this is already taking place as we are seeing changes in the rehabilitation world.



Wang Hong Xing (2013). Power point presentation on the CARM project and Guideline implementation in pilot universities.

**8.3. Project Sub Goal 1:** "Establishment of a committee of members from the International Federation of Physiotherapy and Occupational Therapy and the leaders from the relevant educational institutions in China". (Indicator: A curriculum guideline has been developed and approved by relevant government bodies).

#### **Indicator Ouestions:**

- 8.3.1. Has the committee functioned as was intended?
- 8.3.2. Assess how the committee's work has benefited the project.
- 8.3.3. What is the future role of the committee?

Based on the interviews with CARM, two leaders from the expert panels, NMA project manager, teachers and university leaders, this committee that consisted of international experts and leaders from the educational institutions in China took up the lead and functioned to spearhead the drafting of the new curriculum. It is indeed amazing that these experts (from China and international countries), coming from diverse cultural background, worked together to draft the first Guideline for PT & OT Education. It is no easy task and the committee needs to be applauded for this daunting effort. This guideline can indeed be the foundation to build the OT or PT curriculum for many universities in days ahead. As for the future role of the committee, they can continue to be the consultant for schools wanting to adopt international standards in designing their curriculum. One leader also mentioned that other possible future roles can be professional practice monitoring and advocating for graduate education for the therapists.

**8.4.Project Sub Goal 2:** "Agreements are worked out with universities that will function as pilot users for the new curriculum". (Indicator: The curriculum has been put to use by at least 2 universities).

#### **Indicator Questions:**

- 8.4.1. To what extent have the pilot universities used the guidelines to create curriculum?
- 8.4.2. Have agreements been made?

- 8.4.3. To what extent is the curriculum being used to teach PT and OT students?
- 8.4.4. Assess the challenge that the pilot universities have encountered in this process.
- 8.4.5. What are the lessons learned from these pilot universities' use of the guidelines?

# Implementation of the curriculum:

All 3 pilot universities used the Guideline (draft) as the framework to create the PT and OT curriculum for the students since September 2011 even before the final version was ready for printing. The leaders of the 3 pilot universities had been very supportive and very determined that that this would be the direction for the training of therapists the schools would take. All 3 universities started with foundational courses of which both disciplines would take, but by the second or latest the third year, the students of the two disciplines were divided into two streams as recommended by the Guidelines. On examination of the curriculum in all 3 pilot universities, there was a good balance of fulfilling of what is required nationally by the Education Department and at the same time trying to adhere to the minimal standards stipulated by WFOT and WCPT. As it is not the place for this evaluation to comment or assess the standards of education of PT and OT in these universities, the evaluation team still found that the universities were trying their very best to follow the guidelines. All three universities expressed hope that they would like to be recognized by WCPT and WFOT in the near future. The three universities had also written curriculums for PT and OT which were shared openly with the evaluation team.

Student Focus Groups & Structured Interviews: (summaries from transcription)

Themes	Comments collected during focus groups and structured interviews from the students of the three universities			
Support from school	Yes			
Learning environment	Classrooms & clinical skills labs on same campus, same building, foundation sciences labs. Easily accessible to libraries and to the teaching hospitals. Campus devoted to rehabilitation education. A vice dean to coordinate the rehabilitation faculty. Total revamping of all rehabilitation curriculum			
Teachers	Great to have overseas teachers. When the overseas teachers came, the schedules were tight and but learnt a lot from them Need more teachers Able to combine western and traditional Chinese medicine together in rehabilitation			
<b>Learning Resources</b>	Need more textbooks. Have translated textbooks.			
Clinical Training (settings)	Have opportunities to go out of province to have placement Would like to have placement immediately after theory classes so that things were fresh in mind.			
Clinical Training (preceptors)	Very professional after the separation into two streams			

	Understand the need for more clinical teachers to precept in clinical					
	placements					
Local resources	Libraries, internet, textbooks (Chinese and overseas publishers)					
Collaboration with	Collaboration with Korea - a few PT students sent to Korea to study					
overseas universities	and to be trained in their 3 <sup>rd</sup> and 4 <sup>th</sup> year. Have to study Korean in					
	their 1 <sup>st</sup> and 2 <sup>nd</sup> year in preparation for their overseas experience.					
	School has liaison with Japanese universities.					
Additional	A few students expressed a wish that they can take PT and OT					
comments	courses even though they are separated into 2 streams					
	Too much theories, would like to have more practicum					
	Would like to have practicum right after the theory classes					
	Would like to know more about other schools and rehabilitation in					
	overseas countries.					
	More textbooks in Chinese					
	Have overseas teachers to facilitate clinical teaching in psychiatric					
	rehabilitation					
	Hoping for accreditation and possibility of working overseas					

Teachers Focus Groups & Structured Interviews: (summaries from transcription)

Themes	Comments collected during focus groups and structured interviews from the teachers of the three universities				
Support	Definite support from leaders, faculty head, party leaders, all the way to the Dean of the university				
Learning environment	Aim to have classroom and labs up to international standards by 2015 Continue to expand with more addition and classrooms.				
Teachers' training	OT- taken the on-line courses teachers training (12 weeks on-line and 3 weeks on site face to face instruction) PT- also attended on-line courses, with face-to-face instruction for 2 weeks. At least 3 teachers had taken the OT on-line training courses for teachers. Had modules taught by overseas teachers from Australia, U.S.A., Taiwan and Hong Kong. University also had hired overseas trained PTs and OTs to teach in the present curriculum.				
Continuing support and education for teachers	Teachers can still access discussion forum after the on-line training.  Teachers from all three universities had been given opportunities to go take continuing education courses in other provinces. Some have opportunities to go to Hong Kong and also overseas.				
Resources for students and for teaching	Require more textbooks in Chinese. Most of the books are translated to Chinese from English.  Would like more input on curriculum planning, textbooks				

	Require more textbooks in Chinese. Most of the books are translated						
	to Chinese from English, Japanese or Korean						
	When teachers came from overseas, therapists and teachers from						
	neighboring hospitals and institutions were invited to attend for free.						
Clinical Training	Not adequate clinical settings for student clinical placement especially						
(settings)	in the area of pediatric and psychiatric rehabilitation.						
Clinical Training	Acute need for qualified clinicians with pediatric and psychiatric						
(preceptors)	expertise to mentor students.						
Local resources	Would like more forums where teachers can discuss teaching issues						
	Pooling together of resources and collaboration of community						
	partners.						
Collaboration with	The university has plans to engage 4 overseas teachers (PT & OT) in						
overseas universities	2014						
	Collaboration with universities in the States and Taiwan. Plan already						
	in place and also already hired overseas teachers to teach. Already						
	hired some teachers that are trained overseas in PT or OT.						
Additional	More input on how to use the guidelines, more training classes						
comments	Needs support on designing curriculum, some parts of PT curriculum						
	overlapped with OT and vice versa						
	Need more teachers						
	Balancing teaching responsibilities and clinical responsibilities, any						
	possibility of providing stipend from one teacher.						
	Students were receptive of the separation into PT and OT curriculum						
	Felt that the guidelines had helped to reach the original goals, saw the						
	difficulties in needing more qualified teachers.						
	Students appeared very into the courses after the separation into two						
	streams - the students chose the streams according to their interests						
	Would like more continuing education and more input on teaching						
	resources						
	Would like continuing support from international support as course						
	continue to contextualize to the local scene.						
	continue to contextualize to the local seene.						

# **Project Effectiveness:**

**Indicator Questions:** 

- 8.5.1. To what extent did the project achieve the development goal?
- 8.5.2. To what extent did the project achieve the project objective?
- 8.5.3. To what extent did the project achieve the sub goals?

Based on the interviews and focus groups, the Guidelines on PT and OT Education had been confirmed to be adopted by the three pilot universities as the framework for developing separate curriculum for physical therapy and occupational therapy. The project objective had been achieved and the curriculums planned and used by all three universities followed the guidelines as proposed by the committee that includes members from WFOT and WCPT. It is understood that the curriculum follows the minimal

standards stipulated by WCPT and WFOT. The sub-goals of the establishment of a curriculum committee with Chinese and international leaders had also been realized as early as 2010 which led to curriculum being developed and approved by government bodies and was then eventually worked out with three pilot universities to use the new curriculum. This was confirmed to be in use by the final evaluation team.

The development goal of whether children with disability will be impacted by the new curriculum is hard to be determined at this stage as the first classes of students using the new curriculum have not graduated yet or practicing in the community. However, all participants and partners in the project are very hopeful that the new graduates will make an impact in service delivery for children with disability in China.

# 8.5.Project Impact:

**Indicator Questions:** 

- 8.6.1. Did you identify any intended positive impact of the project?
- 8. 6.2. Did you identify any intended negative impact of the project?
- 8. 6.3. Did you identify any unexpected positive impact of the project?
- 8.6.4. Did you identify any unexpected negative impact of the project?

Positive impact was that at least three universities had now piloted the new curriculum. This project had brought forward international and national collaboration in rehabilitation education. The importance of raising the standard of practice and subsequent better service delivery to the clients (patients) are acknowledged in all the interviews and focus groups. The impact of service delivery may not be immediately observed, but there is not a doubt that the future physical therapists and occupational therapists will play a key role in the rehabilitation history of China.

The pilot universities are taking the lead to implement the new curriculum and possibly other universities in the nation will be interested to model after them and follow suit. CARM has also taken the lead to continue with the online teacher training to provide training and support for the teachers.

Participants had not seen or reported negative impacts so far. However, one or two had wondered whether it is better to have just generic rehabilitation therapists so that they can do both physiotherapy and occupational therapy. A foreseeable positive impact may be bringing up the discussion of how this will relate to billings and funding, scope of practice and collaboration of the rehabilitation team. The existing medical and healthcare system and policies will influence some of the decisions made in these areas.

## 8.6. Project Relevance

**Indicator Questions:** 

- 8.7.1. To what extent does the project conform to the needs of the target people?
- 8.7.2. Is there a need for PT/OT education on an international level in China?

The project has been instrumental in mobilizing and gathering of interested rehabilitation leaders (both Chinese and international) to form a PT & OT Education committee with subsequent publishing of ``Guidelines for PT and OT Education`` to be used in training of therapists of the respective disciplines. Of all the participants that were interviewed, all agreed that there is a need for rehabilitation education to be raised to international level.

Most of the respondents also recognized that on an international level, the training of the two disciplines are done in separate streams in other countries and that the present system of training of generic rehabilitation therapists in the nation will pose some difficulty when applying for recognition or accreditation with both WCPT and WFOT.

# 8.7. Sustainability

**Indicator Questions:** 

- 8.8.1. Is it likely that the guidelines will be used after the project ends?
- 8.8.2. Will the guidelines continue to be used by the pilot universities?
- 8.8.3. How can the project partner, CARM, ensure that the guidelines will be used by the education institution in China?

These questions were asked of the participants, especially university and rehabilitation leaders. Leaders of the pilot universities were positive that the guidelines would continue to be used and there will continual modifications of the curriculum as the teachers start teaching from it. CARM and the expert panel leaders were also optimistic that the guidelines will eventually be adopted by other education institutions in China. One leader also mentioned that in order for the OT and PT curriculum to be used nationally, it would need to have approval from the Education Department. Much work still has to be done by CARM and other leaders in this area.

8.8.**Project Efficiency-** this project was initiated by Norwegian Mission Alliance in 2010 in collaboration with CARM. The project cost has been shared between the two partners as specified in annual budgets and finance reports

**Indicator Questions:** 

- 8.9.1. Did the project use the resource efficiently to reach its goals?
- 8.9.2. Has the financial management of the project been open and transparent?
- 8.9.3. Does the financial management of the project follow the agreement between NMA and local partner?

Norwegian Mission Alliance, as a non-governmental organization in China had been instrumental in helping this project to move forward. The financial support and the coordination of international expertise were commendable. Though the evaluation team did not inspect the financial accounts, there had not been any reports of financial intransparency or mismanagement in the course of the 4 days interviews and meetings with the other parties and partners in the project. As the project agreement was signed between CARM and NMA, one comment was made by a leader involved in the project implementation that reimbursement was sometimes slow because of the flow of money has to come through CARM. This problem was somehow later resolved satisfactory to both parties.

# 9. Suggestions

**Ouestions:** 

9.1. What needs to be done to realize the project development goals?

- 9.2. What needs to be done to secure enough PTs and OTs to graduate in China?
- 9.3. Any other suggestions or opinions?

The publication of the `PT and OT Education Guidelines `is a big step forward to help raise and standardized the training of physical and occupational therapists to an international level. In order for the project development goal to be realized, one still has to await the impact of the graduates of the new curriculum will made when they enter the workforce and treating children with disability. The three universities recognized that there is a great lack of qualified PT and OT teachers nationally to teach in the respective disciplines. This is also a tremendous need for qualified pediatric PT or OT to provide clinical perceptorships for students. In occupational therapy, there is a real lack of psychosocial rehabilitation and qualified psychosocial occupational therapist to provide teaching in the university as well as clinical teaching in sites for clinical fieldwork. The pilot universities had found an innovative way by inviting qualified therapists trained overseas to teach intense short modules and help with clinical fieldwork. Some of them are visiting scholars or have contracts with the universities as their staff.

## 10. Recommendation and conclusion

Observations from the field visits in November 2013 confirmed that in order to have a change in the curriculum, support from policy makers and university leaders are very important. Without the endorsement and support from the leaders, changes would be unable to be implemented. The leaders should be commended for their long term vision and understanding of the rehabilitation education needs in the nation. It is very important too that these changes are in parallel with the philosophy of the Education Department of the country. Probably much work still needs to be done as the diploma of rehabilitation therapists are recognized whereas no schools have yet given out diplomas or certificates for a degree in physical therapy or in occupational therapy. This may be a hurdle that needs to be overcome before the separate curriculums can be accepted nationwide.

Another issue is the lack of professionally trained physical therapists and occupational therapists to act as teachers and clinical instructors/preceptors. At present, most of the training is done by rehabilitation doctors that are professionally trained in physical therapy or occupational therapy (Wang, 2010). NMA and CARM had held on-line training modules and a three week face-to-face instruction for the teachers for teaching their respective disciplines. These training the trainer modules were met with success and also were a source of on-going support for the teachers. The teachers and leaders also recognized that there was an acute shortage of qualified trainers for occupational therapy in the psychosocial and pediatric field. Some universities had invited international experts to participate in their core teaching, or even employed them to teach for longer periods. One university had engaged a physical therapy professor from overseas as one of the school leaders to specifically help in coordinating the new curriculums in the rehabilitation faculty and research. Some students also had the opportunity to attend classes in their 3<sup>rd</sup> or 4<sup>th</sup> year in overseas universities. Though this means learning a new language or

adjusting to a different culture for the students, this is still helpful because of the limited qualified teachers and exposure to the international scene of rehabilitation. Many students and teachers also commented on the lack of good teaching material in physical therapy and occupational therapy in the national language. Many textbooks are translated. There is a need for locally trained physical therapists and occupational therapists to write course textbooks in their own language and to contextualize the material to the local culture. Despite that, the teachers are trying their best to take courses and upgrade their skills as they are teaching. There is also a need for stronger collaboration in the community institutions (government or private) that provide clinical education for the students. This will give support to the clinical preceptors as well as reinforce the theories that the students learnt in school. This is happening in one site where lectures or seminars conducted by local and overseas experts are opened to clinicians and teachers even though they were not affiliated with the universities. The tuition fee was also waived.

Regarding resources, besides observation of more teaching materials, there are adequate equipments and modalities in the clinical laboratories to learn. The universities and teaching hospitals were opened to getting new equipments and reports of expansion and restructuring of teaching areas on campus were shared. However, all acknowledged that there is a great need for "software" skills - meaning that teaching students to have clinical reasoning skills, critical thinking, evidence based medicine and keeping up with the latest research in physical and occupational therapy -for example, the over-emphasis on physical modalities and evidence based practice (Dean, 2009).

In summary, the Guidelines for PT and OT Education were utilized by at least three universities in piloting a new curriculum for the training of physical therapists and occupational therapists. The new guidelines were aimed at supporting a new standard for a national wide curriculum that would meet the minimal standard of WCPT and WFOT. Three universities were in the pilot study. Positive feedbacks from national rehabilitation leaders, universities leaders and faculties and students were received during on-site field visits in November, 2013 to the three universities. The students of the new curriculum were also hopeful that they would be able to find employment in the rehabilitation field. As one of the leaders had commented, "though we have a slow start in rehabilitation education, we have the potential and will definitely get to our destination at good speed". Certainly the day will come when the two professions will be recognized as a valued component in rehabilitation with well established physical therapy and occupational therapy schools.

Appendices

# Appendix A

#### References

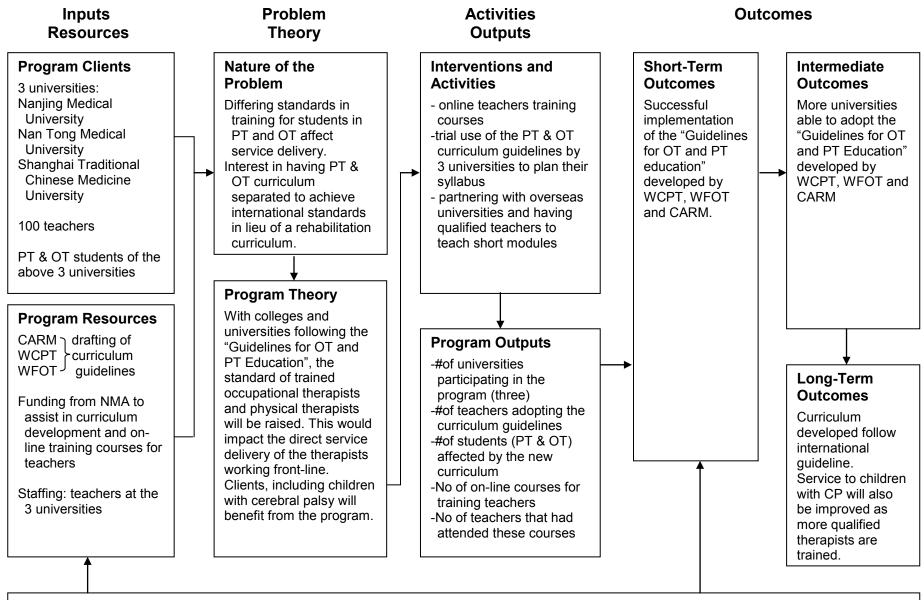
- Dean, E. (2009). Physical therapy in the 21<sup>st</sup> century (Part II): evidence-based practice within the context of evidence-informed practice. *Physiotherapy Theory Practice*, 25(5-6), 354-368.
- Law of the People's Republic of China on the protection of persons with disabilities, Chapter 2

  Article 18. Retrieved on February1, 2014 at

  http://www.cdpf.org.cn/english/law/content/2008-04/10/content 84949.htm
- Zhou, D.H., Li, J.A., Ao, L.J., Wang.Y.L.& Lin, G.H. (2013). Guidelines on PT & OT Education.
  - Beijing, China: Renmin weisheng chubanshe.
- Norwegian Mission Alliance (2012). [Internal project evaluations of pilot universities 2012: appendix E]. Unpublished report.
- Wang, H.X. (2010). [Sampling investigation report on baseline of rehabilitation education in China]. Unpublished raw data.
- Wang, H.X. (2013). [Powerpoint presentation on the CARM project and Guideline implementation in pilot universities]. Unpublished report.
- World Confederation for Physical Therapists. Retrieved on February 1, 2014 at www.wcpt.org World Federation of Occupational Therapists. Retrieved on February 1, 2014 at www.wfot.org.

Appendix B: Logic Model

**Program Title**: "National Standard for Physiotherapy and Occupational Therapy" education project using the Guidelines for OT and PT education developed by WCPT, WFOT and CARM



# External/Environmental Factors: (facility issues, economics, public health, politics, community resources, or laws and regulations)

1) Resources: Qualified teachers to teach, qualified clinical preceptors during clinical placement, books and teaching materials appropriate for the country, funding available for the pilot program from Norwegian Mission Alliance, international panel of experts for consultation, publication of the curriculum guidelines 2) Clients: teachers and students of three participating universities, committed leadership. 3) Positives: international support from WFOT, WFPT, NMA & Norwegian government, national support from CARM.

# **Appendix C**

## **Abbreviations**

**CARM:** Chinese Association of Rehabilitation Medicine

**CDPF:** China Disabled Peoples Federation

HH: Holistic Habilitation for Children with Cerebral Palsy

**HHC:** National Standard for PT & OT Education Project

NMA: Norwegian Mission Alliance

OT: Occupational Therapists

PT: Physical Therapists

**SDPF:** Sichuan Disabled Person's Federation

**WCPT:** World Confederation for Physical Therapists

**WFOT:** World Federation of Occupational Therapists

# Appendix D

Appendix D- information on focus groups and structured interviews

Focus Groups: (students and teachers)

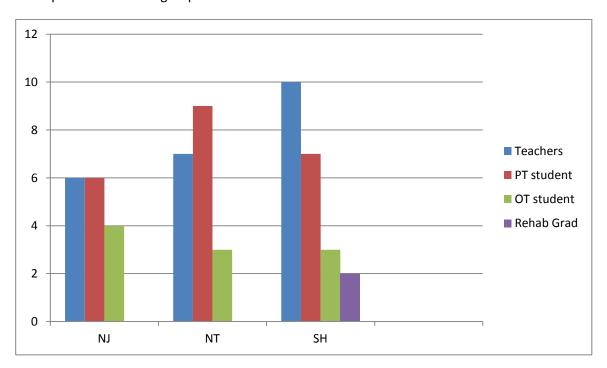
Total number of focus groups: (total number of universities visited = 3)

For teachers= 4 focus groups in total

For students = 3 focus groups in total

Nanjing Medical College		Nan Tong Medical College		Shanghai TCM University	
Teachers	Students	Teachers	Students	Teachers	Students
2 Focus groups	n=10	n=7	n=12, all 3 <sup>rd</sup>	n=10	n=12 ( 2 <sup>nd</sup> and
n=6	(6 PT, 4 OT	(3 OT, 4 PT)	year students		3 <sup>rd</sup> yr students,
(3 teachers in	stream, all 3 <sup>rd</sup>		(3 OT, 9 PT)		includes 2
each group)	year student)				rehab students
					in 4 <sup>th</sup> year)

# Participants in the focus groups



Structured questionnaires for students also occurred at Nan Tong Medical College:

n= 12 (4 OT and 8 PT students)

# Appendix E: Project Participants & Acknowledgments

This project is only possible through the collaboration of the following participants: (according to alphabetical order)

Chinese Association for Rehabilitation Medicine

Mission Alliance/Buer Consult AS

Nan Tong University

Nanjing Medical University

OT Expert Committee

PT Expert Committee

Shanghai Traditional Chinese Medicine University