

1. Project title
Development of bronchoscope technique and spreading related device in Vietnam
2. Country name
Socialist Republic of Vietnam
3. Background
<p>Continuing from the previous 2 years, targeting Vietnam because of the detailed understanding of the current situation and needs, and deep relationships and no linguistic obstacles for project leader. For the current situation and issues until the previous year, see the previous year's planning document, reports, and attached documentation.</p> <p>The main subjects of technology transfer / device deployment is transbronchial ultrasound (EBUS), and we also educate matters need for preliminary assessment and for implementation. In the previous years, a total of 44 Vietnamese doctors and nurses from 17 hospitals visit Japan, and in the members 29 Vietnamese doctors and nurses participated in 3 weeks training course, and we hold related lectures at the congress of the Vietnam Respiratory Society 2018 and so on, and actually at 6 hospitals, which are central hospitals and bronchoscopy educational hospitals in Vietnam, about 70 cases of inspection were done bronchoscopy with EBUS safely and with high accuracy. For details, refer to the report of 2017 and 2018. EBUS should be a technique to be commonly done in routine practice, preparations for insurance inclusion are proceeding. We have already started collaborating with the existing bronchoscopy education program in Vietnam from the previous year and this year we will continue to cooperate with the Vietnamese Respiratory Society fully, and in the future we will develop this project of EBUS to the provincial hospital level throughout Vietnam.</p>
4. Objective
<p>Continuing this year, with the full cooperation of the Vietnamese Respiratory Society, we aim to further expansion of medical institution to training, completion the textbook started writing from the previous year, further improve the knowledge, technology and experience among doctors who received the previous year's training to be doctors who will lead the EBUS development in Vietnam.</p> <p>In addition, we will play an auxiliary role in establishing the respiratory endoscopic education center for the whole of Vietnam and Southeast Asia, and we will be a bridge between related academic societies in Japan and the Vietnamese Respiratory Society.</p>
5. Project outline

It is a project on technique of examination conducted using products of Olympus, a Japanese company. In addition, recently it has become common all over the world, but flexible bronchoscopy began in Japan and Japan is leading the world of technique of it.

Flexible bronchoscopy not including EBUS is a general exam which has already been done also in provincial hospital level in Vietnam and of cause included in health insurance system. Regarding additional health insurance adaptation when using EBUS, the Vietnamese Respiratory Society is active for future introduction. Regarding the use of new medical devices in Vietnam, we have been conducting examination on actual cases at a few medical institutions in the previous years, and various problems have been resolved at that time. Because it is a technique to add on the existing bronchoscopy examination, it is presumed that it is possible to spread whole country on the existing medical system.

In previous year, we are targeting some leading medical institutes throughout Vietnam under the full backup of the Vietnamese Respiratory Society. Although it is a useful examination for diagnosis of rare diseases, the main diseases to be examined are lung cancer and tuberculosis, which are very numerous number of patients. Even among lung cancers with a high number of patients and high malignancy, even though therapeutic drugs are available in national TB program, the spread of multidrug-resistant TB in the worst level in the world. To against this situation, more early diagnosis and more frequent checking susceptibility test of anti TB drugs before treatment are one of the urgent tasks that could be improved by spreading EBUS.

it is difficult to estimate the number of patients who get benefit from EBUS, because it is a diagnostic technique with so many kinds of disease (2018 In cooperation with the Vietnamese Respiratory Society we plan to try to estimate). But now patients having indication of EBUS-related examination should be tried diagnosis with a very invasive alternative examination, be abandoned the diagnosis and treatment, be gave up early diagnosis and wait becoming severer to diagnosis in the other way, or to take invasive treatment without diagnosis, etc. Induction of EBUS throw this project might be a great influence on public health and medical level.

EBUS is also described in the global guidelines, and also is the technique and examination that are commonly carried out in developed countries, and in neighboring countries of Southeast Asia

6. Implementation structure

6-1. Japanese side

All of members of NCGM Respiratory Medicine; increase work by 3 to 5% for each member.
Mr. M. Hashimoto, the deputy director, will continue to take over as the leader of this project.
Estimated Increase work by 10%.

* This year's teaching materials can be almost shared with those created last year

* Because there is no linguistic barrier, it is guidance with the same feeling as accepting excellent domestic trainees.

Equipment mainly uses existing facilities of NCGM and Olympus Japan's training laboratory.

We plan to visit other medical institutions as appropriate.

The funds from this project are used according to the budget plan.

6-2. Counterpart country side

<Medical institutes for training in NCGM>

We will target many medical institutes as much as possible, which conduct respiratory endoscopy of all Vietnam. At the time of planning, in addition to the four educational top hospitals that participated this project in 2017, expand to the cancer hospital (K), military hospitals (108 others), university hospitals etc. We also encourage participation of provincial level hospitals expecting future development.

< Trainee for training course in NCGM>

As in last year, the main target is doctors. We will also accept nurses who work to help doctors in bronchoscopy at the same time. Recruitment will be mainly done by the Vietnamese Respiratory Society, and recruits and selects promising doctor nurses in the future. In more detail, please refer to another document about application.

<Participation in congress of Japanese related Societies>

Invite Vietnamese doctors to the Japan Society for Respiratory Endoscopy (Shinjuku, Tokyo) in 2018, and short-term visit NCGM to grasp the situation of bronchoscope in Japan. Assume bosses of participants in NCGM training.

<Institutes in Vietnam for technical assistance>

We target about 10 institutes, including medical institutes participated in the previous year's training and medical institutes in a public and educational position newly included. As the academic societies, we contact and cooperate with the Vietnamese Respiratory Society, as appropriate, the Hanoi Respiratory Society · Ho Chi Minh Respiratory Society.

Cooperation from the planning stage of the Vietnamese Respiratory Society, recruitment selection of trainees etc. Participating medical institutes solve some In-hospital procedures for the implementation of examination at the site.

Bach Mai Hospital, Cho Ray Hospital, Vietnamese Lung Hospital, Pham Ngoc Thach Hospital
Hanoi Medical University Hospital, Ho Chi Minh Medical University Hospital
Vietnam cancer (K) hospital, military hospital (108, 103, others)
Large scale items (Hai Duong, Hai Phong, Can tho, etc.) at various provincial hospitals and university hospitals.

7. Indicator	
7-1. Output	<p>16 medical staffs will Join NCGM 3 weeks training, 50% improvement in results by pre / post test</p> <p>In technical guidance in Vietnam, more than 10 doctors will be under direct guidance examination.</p> <p>More than 200 audience are expected for related lectures such as the Vietnamese Respiratory Society and the other congress, meeting.</p> <p>Create a textbook under the name of Vietnamese Respiratory Society and distribute it free of charge, for doctor and nurses related to respiratory endoscopes in Vietnam who could not participate directly in the training course, estimated to about 150 people in provincial, regional hospitals that is carrying out bronchoscopy or wanting to do it in the future, estimated at about 100 organizations.</p>
7-2. Outcome	<p>Number of EBUS-related examination, more than 50 under direct guidance of Japanese expert and 50 without direct instruction of expert.</p> <p>More than 2 institutes purchase EBUS system or related equipment.</p>
7-3. Impact	<p>From the high original needs, it is estimated that probably Vietnamese doctors will continue their efforts to introduce technology after the project (Vietnamese doctors and nurses are saying that this project is very effective and useful as a training about EBUS and bronchoscopy. So we would like to continue this project as much as possible while there are needs). It is hoped that EBUS spread to all hospitals at the provincial hospital level. This project will be the starting point of the stream.</p> <p>Examination under EBUS will be included in the health insurance system in Vietnam.</p>
8. Main activities	
8-1. Training in 2019	
1)	Training in NCGM hospital about EBUS and matters related in bronchoscope including reading CT and so on, 6 courses of 3 weeks training for 16 medical staffs.
2)	Help technically conducting bronchoscopy with EBUS for actual patients in Vietnam and join educational programs for Vietnamese bronchoscopists as a lecturer
3)	Write a textbook for bronchoscope with Vietnamese Society of Respiratory in Vietnamese.
4)	Develop the relationship between Respiratory Society of two countries and other related Societies.