

Country Name	Project for Improvement of Medical Service in the Central Region
Socialist Republic of Vietnam	

## I. Project Outline

Background	The Government of Vietnam aimed at universal access to quality medical service under the National Strategy on People's Health Care and Protection (2001-2010). Although the efforts for reform greatly improved the medical service in Vietnam, the gaps in the medical service between rural and urban areas and between the wealthy and the poor had been expanded. During 1992-2005, the Government of Japan had supported the two core hospitals, Cho Ray Hospital in the South and Bach Mai Hospital in the North in order to improve the medical services at respective regions. However, there were difficulties for the two core hospitals to cover the whole population in the country, even in the population in the Central Region. Therefore, the Government of Vietnam requested a technical cooperation project to the Government of Japan, aiming to improve medical service in the Central Region through strengthening function of the Hue Central Hospital, which served as the top referral hospital and providing trainings to the provincial hospitals in the region. In addition to the technical cooperation, the Japanese Grant Aid was implemented in 2006 to construct the outpatient and examination facilities in Hue Central Hospital.												
Objectives of the Project	<ol style="list-style-type: none"> <li>Overall Goal: Medical Services provided by the provincial hospitals (PH) in the Central Region are improved.</li> <li>Project Purpose: Training activities to improve PH's medical service by the Hue Central Hospital (HCH) are expanded and improved through Training Management System.</li> </ol>												
Activities of the project	<ol style="list-style-type: none"> <li>Project site: 12 provinces and 1 city (Hue) in the Central Region (14 PHs including Ha Tinh, Quang Binh, Quang Tri, Da Nang, Da Nang C, Quang Nam, Quang Nam C, Quang Ngai, Binh Dinh, Phu Yen, Kon Tum, Gia Lai, Dak Lak, and Dak Nong) <i>Note: There are 16 PHs in the Central Region. While the Project mainly targeted 14 PHs for the technical transfer activities, the target of the Overall Goal covered all the 16 PHs.</i></li> <li>Main activities: Target Groups: Staff of HCH and PHs 1) In-service trainings for nurses at HCH, 2) Implementation of "Total Care<sup>1</sup>" activities at HCH, 3) Trainings on nosocomial infection control at HCH, 4) Trainings on medical equipment management at HCH, 5) Hospital management system and trainings at HCH, 6) Development of training manuals and materials and trainers' training at HCH based on the activities from 1) to 5)<sup>2</sup>, 7) Training for staff of PHs, 8) Conduct monitoring and follow-ups of medical staff of PHs trained by HCH and strengthen the 2-way information communication between DOHA (Direction Office of Health Care Activities)<sup>3</sup> Center of HCH and PHs.</li> <li>Inputs (to carry out above activities)  <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Vietnamese Side</td> </tr> <tr> <td>1) Experts: 5 long term + 33 short term</td> <td>1) Staff allocated: 51 persons</td> </tr> <tr> <td>2) Trainees received: 28 persons</td> <td>2) Land and facilities: spaces for trainings and meetings</td> </tr> <tr> <td>3) Equipment: equipment for trainings, including projectors, PCs, software, and so on.</td> <td>3) Travel expenses and per diem, cost for renovation of medical facilities</td> </tr> </table> </li> </ol>					Japanese Side	Vietnamese Side	1) Experts: 5 long term + 33 short term	1) Staff allocated: 51 persons	2) Trainees received: 28 persons	2) Land and facilities: spaces for trainings and meetings	3) Equipment: equipment for trainings, including projectors, PCs, software, and so on.	3) Travel expenses and per diem, cost for renovation of medical facilities
Japanese Side	Vietnamese Side												
1) Experts: 5 long term + 33 short term	1) Staff allocated: 51 persons												
2) Trainees received: 28 persons	2) Land and facilities: spaces for trainings and meetings												
3) Equipment: equipment for trainings, including projectors, PCs, software, and so on.	3) Travel expenses and per diem, cost for renovation of medical facilities												
Ex-Ante Evaluation	2005	Project Period	July 2005 to June 2010	Project Cost	546 million yen								
Implementing Agency	Ministry of Health, Hue Central Hospital												
Cooperation Agency in Japan	Ministry of Health, Labor and Welfare, National Center for Global Health and Medicine												

## II. Result of the Evaluation

### 1 Relevance

This project has been highly relevant with Vietnam's development policy "universal access to quality medical service" under the National Strategy on People's Health Care and Protection (2001-2010), development needs of human resource development of the health and medical sector in the Central Region at the both times of ex-ante evaluation and project completion. It was also consistent with Japan's ODA policy supporting for improvement in livelihood and social aspects including the health and medical sector at the time of ex-ante evaluation. Therefore, relevance of this project is high.

<sup>1</sup> Total Care was clarified as follows; 1) Total care is valuable care model. 2) Total care is practiced by all kinds of staff in the hospital on the basis of concept of patient-center oriented. 3) Total care means not only physical care but also social and mental care. The service is provided for all the time of administration. 4) In order to practice total care, it is necessary to fully arrange human resource and medical equipment (quoted from page 9 of Joint Terminal Evaluation Report January 2010).

<sup>2</sup> Improved i) nursing management, ii) Total Care, iii) nosocomial infection control. iv) medical equipment management and v) hospital management system was defined as 'Model Medical Services'.

<sup>3</sup> Direction Office of Health Care Activities (DOHA) is one of regulated tasks of upper level hospitals to provide technical guidance and support to lower level hospitals through training and monitoring.

## 2 Effectiveness/Impact

The project developed manuals and materials for trainer's training, delivered in-services trainings for nurse and trainings of nosocomial infection control, established training monitoring and evaluation system and introduced "Total Care" activities and patient information system.

The Project Purpose was achieved at the time of project completion. During the project period from 2005 to 2010, 1,088 staffs were trained in total. The training opportunities for doctors, bachelor nurses, nurses, midwives, pharmacists, engineers, technicians and others were provided equally. 12 Provincial Hospitals (PHs) in the Central Region improved their nosocomial infection control by regular monitoring of each section, a check system using a checklist, and hand washing of the staff and so forth. The short-term evaluation<sup>4</sup> was applied to all the training courses and all the courses achieved more than 80% of the target.

Those project effects have been fairly sustained after the project completion. 751 staffs from PHs were trained for the ex-post project period from 2010 to 2014. Also, all the training courses were assessed by the short-term evaluation which was conducted just after trainings but data on results of the short-term evaluation was not available at the time of ex-post evaluation.

For the Overall Goal, medical services provided by PHs in the Central Region have been improved gradually. All the 16 PHs have been continuously practicing Nursing Management<sup>5</sup>, Total Care, preventive maintenance for equipment and the improved nosocomial infection control, which were introduced by the project. Some of PHs decreased the number of cases of nosocomial infection after the project completion. 13 PHs have been practicing the Patient Information System. Out of 14 PHs surveyed by the ex-post evaluation, 5 PHs improved their hospital evaluation score in 2012 conducted by the Ministry of Health (refer the details in the table below). There was no negative impact.

Therefore, effectiveness/ impact of the project is fair.

### Achievement of project purpose and overall goal

Aim	Indicators	Results																																																																																		
(Project Purpose) Expansion and improvement of training activities to improve PH's medical service by HCH	Indicator 1: Number of training participants by job category	<p>(Terminal Evaluation)</p> <p>No. of total medical staff trained from 2005 to 2009 : 1,088</p> <table border="1"> <thead> <tr> <th></th> <th>2005</th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Doctor</td> <td>-</td> <td>58</td> <td>93</td> <td>75</td> <td>74</td> <td>300</td> </tr> <tr> <td>Bachelor Nurse</td> <td>20</td> <td>33</td> <td>2</td> <td>8</td> <td>30</td> <td>93</td> </tr> <tr> <td>Nurse</td> <td>-</td> <td>34</td> <td>52</td> <td>78</td> <td>206</td> <td>370</td> </tr> <tr> <td>Midwife</td> <td>-</td> <td>4</td> <td>2</td> <td>29</td> <td>47</td> <td>82</td> </tr> <tr> <td>Pharmacist</td> <td>-</td> <td>7</td> <td>1</td> <td>2</td> <td>-</td> <td>10</td> </tr> <tr> <td>Engineer</td> <td>-</td> <td>15</td> <td>1</td> <td>4</td> <td>13</td> <td>33</td> </tr> <tr> <td>Technician</td> <td>-</td> <td>61</td> <td>24</td> <td>8</td> <td>61</td> <td>154</td> </tr> <tr> <td>Others</td> <td>-</td> <td>27</td> <td>-</td> <td>-</td> <td>19</td> <td>46</td> </tr> <tr> <td>Total</td> <td>20</td> <td>239</td> <td>175</td> <td>204</td> <td>450</td> <td>1,088</td> </tr> </tbody> </table> <p>&lt;Information Source&gt; Terminal Evaluation Report (EN), p.19.</p> <p>(Ex-post Evaluation)</p> <p>No. of participants of trainings at HCH from 2010 to 2014: 751.</p> <p>No. of participants by job category is not available.</p> <table border="1"> <thead> <tr> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>140</td> <td>47</td> <td>162</td> <td>252</td> <td>150</td> <td>751</td> </tr> </tbody> </table> <p>&lt;Information Sources&gt; HCH questionnaire</p>		2005	2006	2007	2008	2009	Total	Doctor	-	58	93	75	74	300	Bachelor Nurse	20	33	2	8	30	93	Nurse	-	34	52	78	206	370	Midwife	-	4	2	29	47	82	Pharmacist	-	7	1	2	-	10	Engineer	-	15	1	4	13	33	Technician	-	61	24	8	61	154	Others	-	27	-	-	19	46	Total	20	239	175	204	450	1,088	2010	2011	2012	2013	2014	Total	140	47	162	252	150	751
		2005	2006	2007	2008	2009	Total																																																																													
	Doctor	-	58	93	75	74	300																																																																													
Bachelor Nurse	20	33	2	8	30	93																																																																														
Nurse	-	34	52	78	206	370																																																																														
Midwife	-	4	2	29	47	82																																																																														
Pharmacist	-	7	1	2	-	10																																																																														
Engineer	-	15	1	4	13	33																																																																														
Technician	-	61	24	8	61	154																																																																														
Others	-	27	-	-	19	46																																																																														
Total	20	239	175	204	450	1,088																																																																														
2010	2011	2012	2013	2014	Total																																																																															
140	47	162	252	150	751																																																																															
	Indicator 2: Number of the PH reporting the results of nosocomial infection surveillance	<p>(Project Completion) Achieved</p> <ul style="list-style-type: none"> <li>- 12 PHs improved nosocomial infection control.</li> </ul> <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> <li>- 16 PHs have been practicing nosocomial infection control. Decreasing trend of nosocomial infection was observed 4 out of 14 PHs.</li> </ul>																																																																																		
	Indicator 3: Results of Short-Term evaluation	<p>(Project Completion) Achieved</p> <ul style="list-style-type: none"> <li>- 100% of the training courses were applied short-term evaluation.</li> <li>- All the training courses achieved more than 80% of the target.</li> </ul> <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> <li>- 100% of the trainings courses have been assessed by short-term evaluation after the project completion (2010-2014). Data about the results of the evaluation at the time of ex-post evaluation was not available.</li> </ul>																																																																																		

<sup>4</sup> Short-term evaluation is a kind of review meeting between lecturer and trainees after each course was completed. Long-term evaluation is conducted 6 months after the training course finished in order to identify how the action plan of a trainee is implemented and its impact to the whole improvement of his / her hospital.

<sup>5</sup> For the nursing management, the following activities were introduced by the project; 1) To clarify the TOR of nursing staff, 2) To specify activities of nursing management, 3) To organize in-service training committee of nursing, 4) To organize in-service training of nursing staff, 5) To evaluate in-service training of nursing staff and 6) To rotate nursing staff for the purpose of in-service training (quoted from page 8 of Joint Terminal Evaluation Report (January 2010).

(Overall goal) Improvement of medical service provided by PH in the Central Region	Indicator1: Result of the Ministry of Health's annual hospital evaluation score of PH	(Ex-post Evaluation) [Annual Hospital Checkup Score of the target PHs]			
			2010	2012	
		Ha Tinh	88.16	86.25	
		Quang Binh	96.46	96.50	Improved
		Quang Tri	95.90	96.50	Improved
		Da Nang City	96.5	96.5	
		Da Nang Central	95.11	97.14	Improved
		Quang Nam	>95	>95	
		Quang Nam C	90%	Not evaluated	
		Quang Ngai	82.6	84.7	Improved
		Binh Dinh	90.18	87.75	
		Phu Yen	96	92	
		Kon Tum	89.5	93.5	Improved
		Gia Lai	92.3	87.5	
		Dak Lak	95.4	88.7	
		Dak Nong	Good	Average	
		[Note] The data is available up to 2012 since the annual hospital evaluation was replaced by the trial application of "Indicator set to evaluate hospital quality" from 2013. <Information Source> PH questionnaire			
	Indicator 2: Death rate in PH	(Ex-post Evaluation) Not collected due to no reporting of death rate in PHs to CHC (Please see the Note below.)			

Source : Terminal Evaluation Report, Interviews with counterparts

Note: At the time of ex-post evaluation, this data was not collected based on the same reason as applied by the terminal evaluation. At the time of the terminal evaluation, the death rate in PHs was mentioned as a reference since the death rate at the hospital has not necessarily indicated the quality of the medical service provided at PHs. It was because that majority of patients approaching to the end have preferred to return their home and avoid the death at hospital.(Source:P22 of the Joint Terminal Evaluation Report, January 2010)

### 3 Efficiency

The project cost and period were within the plan (ratio against the plan: 79% and 100%). Therefore, efficiency of the project is high

### 4 Sustainability

In the policy aspect, promotion of nursing management, Total Care and nosocomial infection control have been endorsed by the Ministerial Circulars since 2009. During the project implementation period (2005-2010) and thereafter, medical practices such as training of medical staff (especially through Continuing Medical Education – CME) in essential fields such as Nosocomial Infection control, Total Care and Patient Information System have been promoted countrywide by the Ministry of Health. Therefore, good medical practices introduced by the Project became more applicable and sustainable at regional and national level.

Institutionally, the number of trainers has been sufficient, but the training management system, including the training monitoring system had not been perfectly sustained at HCH. For example, long-term evaluation, which is following up the ex-trainees onsite and report from the ex-trainees to HCH had not been carried out between 2013 and 2014. However, with utilization of the 2 –way communication and working mechanism between HCH and PHs, evaluation results are quickly made and shared timely at the time of ex-post evaluation. 10 PHs out of 16 PHs in the Central Region have a necessary unit/system for the model medical services, including training for nurses, Total Care, nosocomial infection control and the Patient Information System but the number of staff of each unit is not sufficient for those activities. Although PHs plan to implement model medical services at more departments, there are difficulties such as lack of working staffs for a large number of patients (hospital overload), lack of trained staffs, lack of budget and required higher work intensity.

In the technical aspect, HCH trainers have sufficient training skills to deliver trainings for medical staff of PHs thanks to the regular updates of their knowledge and skills at the occasions organized by MOH, HCH and their respective National and Regional Professional Association. Also the trained medical staffs of PHs have sufficient skills to practice the model medical services. Training materials developed during the project period are used for training activities of the project site but not used in other settings because it is not modified for the use of other settings.

As for the financial aspect, 9 PHs do not have sufficient budget to cover the training fee for trainings at HCH because the training budget is not prioritized and the actual allocation is limited. However, this situation would be changed in the coming time since continuing medical education (CME) of all health staffs become mandatory according to the Circular issued in 2013 by MOH.

From these findings, it is considered that the project has some problems in institutional and financial aspects of the implementing agencies; therefore, sustainability of the project is fair.

### 5 Summary of the Evaluation

This project has achieved the project purpose through practices of the model medical services such as trainings for medical staff, Total Care, nosocomial infection control and the Patient Information System. The improvement of medical service at PHs has been gradually achieved. As for sustainability, the Ministry of Health endorsed promotion of the model medical services introduced by the project and the medical staffs at the PHs in the Central Region have sufficient skills to practice them. On the other hand, PHs do not have sufficient number of staff to practice the model medical services and sufficient budget to cover the training fee for HCH at the time of ex-post evaluation.

In the light of above, this project is evaluated to be satisfactory.

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

##### [HCH]

- HCH needs to secure other funding sources to maintain the training management cycle and to continue to provide more training courses to PH since PHs do not secure the training budget by themselves.
- Such training courses should not be limited to areas developed within the project but should go further into other new techniques that can be implemented at provincial level. Particularly, formal training such as specialty oriented training and specialist training to enhance practical capability for medical doctors of PHs, should be further strengthened.
- Training materials developed and used for training activities of the project should be updated, standardized and submitted to MOH for approval for the use in other settings and other projects in Vietnam.

##### [PH]

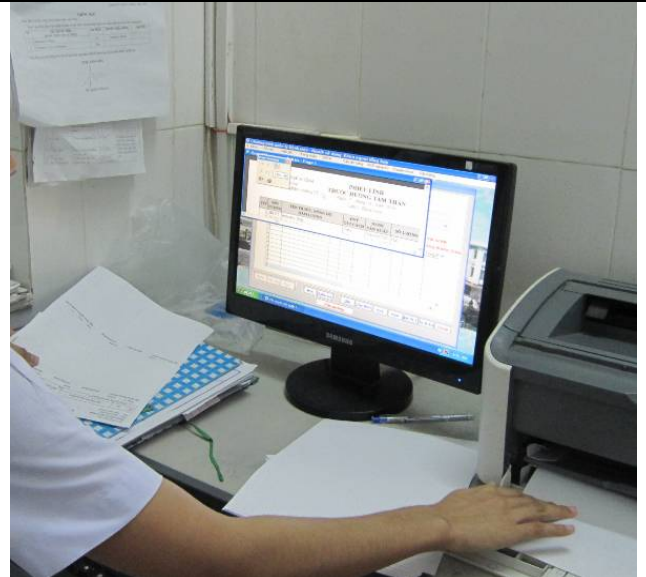
- For maintaining and scaling up model medical services, PHs should be more pro-active in having the detailed action-plan and in securing human resource (doctors and nurses) and budget for training. In term of institutional aspect, training department should be established for better management and coordination of training.

#### Lessons learned for JICA

- Traditionally, doctors tend to be provided with more opportunities to attend training than other health workers (nurses, midwives, technicians) in Vietnam, but the equal opportunities were provided by the project. In order to provide model medical services<sup>6</sup> such as those introduced by this project, future projects in human resources development in health sector should create an equal opportunity for all medical staffs, especially for nurses, midwives, medical technicians.
- Activities promoting good model medical services complying with MOH policies (Circulars, Decisions and so on) can be more easily implemented and sustainable than the services which just copy from the Japanese settings.



Staff at Hue Central Hospital is washing hands to avoid nosocomial infection



Staff at Quang Tri Hospital is entering data to the patient information system.

<sup>6</sup> For the definition of the model medical services, refer the footnote number 2 on page 1.