

Grant Aid Projects/Standard Indicator Reference (Health)

Examples of Setting Indicators for Each Development Strategic Objective

Sector	Development strategic objectives (*)	Mid-term objectives	Sub-targets of mid-term objectives	Types of infrastructure	Standard indicator examples	Policy and methods for setting indicators	Examples of project objectives (project image)	Country name	Project name	FY of evaluation
Maternal and child health	1. Improving maternal and child health conditions	1-1. Improving maternal health	1-1-1. Safe childbirth	Obstetrics and gynecology facilities and equipment	Operation indicators Basic indicators The number of Cesarean sections per year The number of gynecological operations per year Supplementary indicators The facility-based delivery rate in the target area (provided that health/hospital statistics are available) The number of high-risk delivery practices (suction, forceps delivery, etc.) per year The number of patients who received antenatal care/postnatal care per year The number of referrals for high-risk delivery	The five operation indicators shown on the left are normally difficult to calculate in percentages because it is difficult to work out the denominator. In most cases, it is possible to consider that an increase in the number of operations or checkups is nearly equal to an increase in the number of responses to (or preventions of) high-risk delivery, after taking the population growth rate into account. "The target area" could be the area covered by the hospital, a city, etc. It is often difficult to compare maternal mortality (out of 100,000 childbirths) because the incidences in each area are too small.	<ul style="list-style-type: none"> The objectives of the project were to strengthen the function of the National Hospital for Obstetrics and Gynecology (NHOG) as a top referral hospital as well as to strengthen its education and training capacity for lower-level provincial hospitals, by taking the following measures at the NHOG: procuring advanced medical equipment for obstetrics and gynecology; and procuring the training equipment needed to give staff from lower-level hospitals technical guidance on obstetrics and gynecology. The objective of the project was to strengthen the functions of University Clinics of Kinshasa as a tertiary referral hospital, by improving medical equipment for the neonatal care unit, thereby increasing the hospital's technical levels and capacity to host practical training. 	Vietnam	The Project for Improvement of Equipment in the National Hospital for Obstetrics and Gynecology	2009
					Effect indicators Supplementary indicators Maternal mortality in the target area (provided that health statistics are available)			The Democratic Republic of the Congo	The Project for the Improvement of Equipment at University Clinics of Kinshasa	2010
		1-2. Improving infant health	1-2-1. Care for the newborn and infants at health facilities	Facilities and equipment for neonatal units and pediatrics departments	Operation indicators The number of patients at neonatal care units The number of operations at pediatrics departments The number of outpatients at pediatrics departments	These indicators should be used provided that human resources are appropriately allocated. Note that there may be cases where the number of outpatients who can be treated at primary medical facilities increases and tertiary hospitals stop functioning properly.	<ul style="list-style-type: none"> The objective of the project was to strengthen the functions of University Clinics of Kinshasa as a tertiary referral hospital, by improving medical equipment for neonatal care unit, thereby increasing the hospital's technical levels and capacity to host practical training. 	The Democratic Republic of the Congo	The Project for the Improvement of Equipment at University Clinics of Kinshasa	2010

					Effect indicators	<p>Supplementary indicators Infant mortality rate (per 1000) in the target area (provided that health statistics are available) Under 5 Mortality Rate (per 1000)in the target area (provided that health statistics are available)</p>					
		1-2-2. Preventing infectious diseases in infants	Vaccines and cold chain equipment for vaccinations (refrigerators, cold boxes, vaccine carriers, etc.)	<p>Operation indicators The capacity of the central storage (a cold room or a freezer room) (m²) The capacity of regional/district storage (m²)</p> <p>Supplementary indicators The immunization rate for the DPT3 and measles vaccine in the target area (%) The frequency of transporting vaccines from the central to the local (times/year) Vaccine wastage rate (the number wasted/the number procured – the number administered)÷ the number procured)</p>	<p>Effect indicators The incidence of an infectious disease subject to vaccination for children under the age of five in the target area (%)</p> <p>Supplementary indicators Infant mortality rate in the target area Under 5 Mortality Rate in the target area</p>	<p>Although the vaccination rates would not increase by improving equipment alone, the expected direct output of equipment improvement may be that the number of vaccine doses discarded would be reduced due to vaccines being stored and transported under appropriate temperature control. Equipment improvement alone would not increase vaccination rates because the success of vaccination projects largely depends on local cultural factors (such as gender) in addition to the availability of an appropriate human resource and operation cost. However, if all the factors are resolved, the incidence of the disease and mortality could become effective indicators.</p>	<ul style="list-style-type: none"> The objective of the project was to deploy cold chain equipment at district health offices and basic health centers which did not have appropriate cold chain equipment, by replacing their unusable or decrepit refrigerators, cold boxes and vaccine carriers with new ones. The objective of the project was to increase the number of health facilities which can provide regular immunization services (thereby increasing access to immunization services), by improving cold chain equipment at health facilities. 	Madagascar	The Expanded Programme on Immunization	2008	
									Uganda	The Project for the Improvement of Uganda National Expanded Programme on Immunization	2010
Infectious disease control	1. Measures against HIV	1-1. Preventing HIV infection	1-1-1. Strengthening the testing systems and improving access to testing	Rapid test kits for HIV	<p>Operation indicators The number of people who received HIV testing (unit: 10,000 people) in the target area</p>	<p>Supplementary indicators The number of patients with HIV-related illness treated in the target area (people/year) The number of people newly infected with HIV (people/year) (provided that health statistics are available)</p>	<p>Through the appropriate distribution of the test kits and the implementation of the tests, those who are HIV positive can access to appropriate care and awareness-raising activities could prevent further spread of infections.</p>	<p>The objective of the project was to increase the number of HIV counseling sessions and tests conducted by strengthening HIV counseling and testing systems through the procurement and supply of rapid test kits for HIV across the country.</p>	Kenya	The Project for HIV/AIDS Control	2009/2010

Infectious disease control	2. Tuberculosis control	1-2. Treatment of AIDS	1-2-1. Strengthening AIDS treatment systems at health facilities	The installation of related equipment (such as CD4 count machines) (a type of hospital equipment)	Operation indicators The number of times CD4 count machines that are used (times/year)	The precondition for treatment is that the appropriate doses of ARV (antiretroviral) drugs are in stock in an appropriate condition.	The objective of the project was to enable those who have developed AIDS to receive care and treatment promptly, by installing CD4 count machines.	The Democratic Republic of the Congo	The Project for the Improvement of Equipment at University Clinics of Kinshasa	2010
					Effect indicators The number of patients treated at the target facilities (people/year)					
		2-1. Improving the capacity to conduct DOTS	2-1-3. Strengthening logistics capacity	Anti-TB drugs and reagents for TB diagnosis	Operation indicators The DOTS coverage (DOTS: directly observed treatment, short-course) The number of new adult patients who can be treated under the DOTS program (unit: patients) The number of adult relapsing patients who need retreatment and who can be treated under the DOTS program (unit: patients) The number of smear-positive cases newly detected and the number of relapsing patients registered	Basic indicators The preconditions for the implementation of DOTS are the supply of anti-TB drugs, reagents for TB testing, etc. as well as the availability of technicians. The number of new patients (the number of positive cases detected), the number of relapsing patients registered, etc. often increase through the appropriate implementation of DOTS.	<ul style="list-style-type: none"> The objective of the project was to improve the treatment of TB by distributing anti-TB drugs (for adults) needed to control TB across the country. The objectives of the project were to promote the early detection and treatment of patients and improve TB control in the project areas, by taking the following measures in deprived areas where TB diagnosis and treatment for residents are not provided effectively: the provision of equipment needed for TB diagnosis and training; and the provision of anti-TB drugs needed for treatment. 	Myanmar	The Project for Equipment Provision for the National Tuberculosis Programme	2010
			Effect indicators The percentage of cases treated under DOTS				The People's Republic of China	The Project for Tuberculosis Control in Poor Areas (Phase 3)	2008	
		2-2. Improving the capacity to provide treatments beyond DOTS	2-2-2. Improving the capacity (diagnosis, research and treatment) to control MDR-TB (multidrug-resistant tuberculosis)	The improvement of TB wards, the installation of TB culture laboratories	Operation indicators The number of imaging tests per year The number of cultures performed at the laboratories Supplementary indicators The hospital bed occupancy rate (%)	The increase in the number of cultures performed could lead to improvements in the ability to diagnose in the laboratories.	<ul style="list-style-type: none"> The objective of the project was to provide testing and treatment services for the three major infectious diseases, particularly serious respiratory infectious diseases such as MDR-TB and TB/HIV co-infection, by constructing a hospital and procuring equipment in Kabul. 	Afghanistan	The Project for Construction of Hospital for Communicable Disease	2010
					Effect indicators The number of patients treated at the relevant hospitals					

3. Malaria control	3-1. Prevention of malaria infection	3-1-1. Strengthening measures to control infection routes and sources of infection	Long-lasting insecticidal mosquito nets, agent kits	Operation indicators	<p>Basic indicators The number of insecticide treated nets (ITNs) owned by each household, the percentage of households which own ITNs (%) The number of ITNs used by children under the age of five and pregnant women per year</p>	ITNs should be distributed to each household. Note that infants, expectant and nursing mothers can only use ITNs if there is more than one ITN in each household, in many cases.	<ul style="list-style-type: none"> The objective of the project was to increase the use of long-lasting insecticidal nets (LLINs) by children under the age of five and pregnant women, by procuring and distributing LLINs. The objective of the project was to prevent malaria infection by providing ITNs and the kits containing insecticides and immersion agents needed to control malaria. 	Zambia	The Project for Malaria Control	2006
				Effect indicators	<p>Basic indicators The number of people who contracted malaria and the number of deaths due to malaria per year in the target area</p>			Malawi	The Project for Malaria Control	2003
3. Malaria control	3-2. Strengthening the rapid diagnosis and treatment systems	3-2-1. Improving testing and diagnostic capacities	Rapid diagnostic test kits, microscopes and related equipment	Operation indicators	<p>Basic indicators The number of outpatients at primary health facilities per year The number of rapid malaria diagnoses performed at primary health facilities per year The number of microscopic diagnoses performed at primary health facilities per year Supplementary indicators An increase in the number of people infected with malaria per year The number of referral patients per year</p>	The implementation of rapid diagnosis at primary health facilities which are easy for local residents to access can lead to prompt treatment. However, this measure could result in an increase in the number of patients and infected people diagnosed.	<ul style="list-style-type: none"> The expected outcomes of the implementation of the project included the following, among others: (1) the strengthening of comprehensive malaria control measures including prevention, diagnosis, treatment and awareness raising would reduce the malaria incidence and mortality; (2) the project would enable about 100,000 expectant and nursing women to sleep in safe conditions; and (3) the project would enable rapid and appropriate malaria diagnosis. 	Niger	The Project for Malaria Control	2008
				Effect indicators	<p>Basic indicators The number of outpatients at each health facility per year The number of patients treated (the number of therapeutic drugs that are used)</p>			<p>Basic indicators Malaria mortality in the target area</p>	Myanmar	The Project for Malaria Control

Health system	1. Capacity Building for HRH	1-2. Development of highly qualified HRH	1-2-1. Quantitative and qualitative improvement of training for HRH	Facilities and equipment for training schools for HRH	Operation indicators	<p>Basic indicators The classroom floor area per student</p> <p>Supplementary indicators The number of students per teacher The number of teaching aids per student</p>	<p>Projects for improving training facilities for HRH usually involve renovation of deteriorating schools and/or expansion of schools which became too small for their activities, accompanied by the installation of training equipment. The direct effect of these projects is the improvement in the learning environment, which is a precondition for students to receive high quality training.</p> <p>• The objectives of the project were to improve nursing education equipment, reduce disparities in the education environments of nursing schools and improve the levels of medical services provided by nurses, by equipping national universities and nursing universities controlled by the Ministry of Health.</p> <p>• Through the improvement of the Institute for Medical Education in Kinshasa (IEM Kinshasa) as a national model health personnel school in the Democratic Republic of the Congo, the project aimed to: (1) produce high quality intermediate-level health personnel; (2) develop an education model for intermediate-level health personnel; (3) train instructors for intermediate-level health personnel centers nationwide; and (4) provide continuing education for intermediate-level health personnel.</p>	Nicaragua	The Project for Improvement of Education Equipment of Nursing	2009
					Effect indicators	<p>Basic indicators The number of health personnel who receive high quality training (people/year)</p> <p>Supplementary indicators The percentage of graduates from the target schools who passed national qualification test</p>				
Health systems	1. Capacity building for HRH	1-2. Development of highly qualified HRH	1-2-2. Improving technical skills of new and current health personnel	Equipment for clinical practice at health facilities	Operation indicators	<p>Basic indicators The number of clinical practice sessions for students at health facilities (times/year) The number of clinical practice sessions for current health personnel at health facilities (people/year) The number of trainees hosted at health facilities (people/year)</p>	<p>More trainees can attend clinical practice through improvement in the clinical practice environment in health facilities (improvement of observation spaces for delivery rooms and operating theaters, equipment for clinical practice, etc.).</p> <p>The objective of the project was to strengthen the function of the university hospital as a tertiary referral hospital, by improving medical equipment at the hospital, thereby improving its medical services and capacity to host trainees.</p>	Zambia	The Project for the Improvement of the Medical Equipment of the University Teaching Hospital	2009
					Operation indicators	<p>Basic indicators The number of hospital beds (unit: beds) The number of tests performed (tests/year)</p> <p>The number of operations (operations/year) The number of outpatients (people/year) The number of inpatients (people/year)</p> <p>Supplementary indicators The time required to access medical institutions The number of patients referred from lower-level medical facilities (people/year)* Reduction in waiting time at higher-level medical facilities</p> <p>An increase in the number of hospital beds and operating rooms and upgrading of decrepit or malfunctioning equipment will improve the testing and treatment systems.</p> <p>*Upgrading secondary hospitals will contribute to reduce waiting times at neighboring tertiary hospitals because the secondary hospitals can receive more patients referred from primary medical facilities as well as patients who used to directly visit tertiary hospitals as outpatients.</p> <p>The objective of the project was to provide medical services such as Cesarean operations and other operations including appendectomy that were not available in the Province of Aurora,</p>				
	2-1. Improving access to medical facilities and improving the quality of services	2-1-1. Qualitative and quantitative improvement of secondary and tertiary medical services	The construction of hospitals and improvement of equipment							

	2-1-2. Qualitative and quantitative improvement of primary medical services	The improvement of primary health facilities using grant aid for community empowerment	Operation indicators Basic indicators Travel time of target population to medical facilities The average radius of the catchment areas of primary health care facilities in target area (km) The number of outpatients (medical examination and vaccination)* Supplementary indicators The number of medical examinations received per resident in target area per year (unit: times)*	<p>*These indicators should be used provided that medical personnel and drugs and medicines are allocated at primary health care facilities.</p> <p>The reduction of the number of maternal deaths and the deaths of children under the age of five requires a means of emergency transportation to higher-level hospitals in many cases.</p>	The objective of the project was to expand maternal and child health related services by constructing CHPS (Community Based Health Planning and Services) compounds (health posts) along with the provision of necessary equipment in the Upper West Region.	Ghana	The Project for the Development of CHPS Infrastructure in the Upper West Region	2012
			Effect indicators Basic indicators Maternal mortality rate in target area Under-5 mortality rate (provided that health statistics are available)					
2-2. Strengthening the emergency care systems	2-2-1. Improving the patient transportation systems and preparedness for receiving patients in emergencies	The improvement of ambulances, and equipment and facilities for the emergency department at hospitals	Operation indicators Basic indicators The number of patients taken by ambulance in target area to relevant hospitals Supplementary indicators The number of requests from patients on ambulance dispatch.*	<p>An increase in residents' awareness of ambulances will increase the chance of appropriate use of them for emergency transportation. Both data collected at hospitals receiving patients and the number of times ambulances were dispatched should be looked at.</p> <p>*The number should be counted for each emergency station.</p>	<ul style="list-style-type: none"> The objective of the project was to strengthen emergency medical services in Syria by procuring ambulances, onboard equipment, and radio equipment for six target provinces. The objective of the project was to improve the survival rate of patients through emergency medical care by enabling early diagnosis and treatment. This was achieved by improving the emergency medical equipment at regional hospitals in provincial areas, at general hospitals and emergency transportation centers in the capital city. 	Syria Albania	The Project for Upgrading Emergency Services The Project for the Improvement of the Medical Equipment of the Regional Level Emergency Centers	2008 2009

(*) Development strategic objectives which do not apply to any grant aid projects are omitted. Mid-term objectives and sub-targets of mid-term objectives which do not apply to grant aid projects were also omitted.

HRH; human resources for health