The Healthcare Policy and The New System of Medical R&D

Progress and Achievements

Jun, 2013	14 th	Japan Revitalization Strategy , Cabinet decision						
		The Healthcare Policy, agreement among Ministers related						
Jul								
	2 nd	Establishment of Headquarters for Healthcare Policy, Cabinet decision						
Aug	8 th	Headquarters for Healthcare Policy (Decision of the basic policy for budget requests relevant to medical R&D)						
	30 th	Headquarters for Healthcare Policy (Compiled budget requests relevant to medical R&D)						
Sep – Nov								
Dec	24 th	Drafting of government budget FY2014, Cabinet decision						
Jan, 2014	22 nd	Compiled the report issued by expert panel on medical R&D						
	10 th	Headquarters for Healthcare Policy						
Feb	12 th	Cabinet decision regarding the relevant legislation - Act on Promotion of Healthcare Policy - Act on the Independent Administrative Agency of Japan Agency for Medical Research and Development						
Mar –May	May 23 th	Deliberations in the Diet Enactment of the two bills (promulgated on 30 th , May)						
Jun	10 th	Legal establishment of Headquarters for Healthcare Policy						

Promoting Organization for the Healthcare Policy

Headquarters for Healthcare Policy (HHP) Advice for Policy **Expert Review** Headquarters Order Director-General : Prime Minister **Headquarters Order** Article 2. Vice Director-General: Chief Cabinet Secretary and Minister for Healthcare Policy Article 1. : Ministers of the State other than the Director-General Members **Advisers' Committee Expert Panel** or the Vice Director-General Consists of intellectual < functions> Consists of specialists • Preparing the draft and promoting implementation of the Healthcare Policy people belonging to in the medical R&D field. • Role as headquarters of the control tower of medical research and development industrial sector and > Preparing and promoting the implementation of the Plan for Promotion of Medical R&D - Research and review with medicine-related > Comprehensive coordination on budget requests related to medical R&D etc. regard to preparing and institutions, etc. promoting the implementation of the Professional advice about **Promotion Council for the Healthcare Policy** Headquarters Order Plan for Promotion of Growth strategy in the Article 2. Medical R&D. Chairperson : Minister for Healthcare Policy health and medical field. Acting Chairperson: State Minister of Cabinet Office Exit strategy for medical Deputy Chairperson: Parliamentary Vice-Minister of Cabinet Office and R&D, etc. Special Advisor to the Prime Minister(Director-General of the Office of Healthcare Policy) : Director-Generals of ministries related Members Committee of the **Council for Research and Task Force for Global** Academia-Industry-**Task Force for Task Force for Next-Generation Development of Next-**Reach of Japanese-style **Government Network** fund for **Next-Generation Healthcare Industry Generation Medical Medical Technology and** for Drug Discovery medical ICT **Healthcare Policy** Council **Devices** Services

Cabinet Secretariat The Office of Healthcare Policy

Research

Problems in medical R&D and Effects by Act on Japan Agency for Medical Research and Development, etc.

[Problems]

- O Insufficiency of the system to provide consistent support for research from basic stages to practical application, because MEXT, MHLW and METI subsidize R&D individually.
- O Because the system for collecting the data of clinical research and advancing clinical trials is insufficient, it is taking a long time for the results of basic research to lead to new drugs, etc.
- O Although the market related to pharmaceuticals and medical devices is growing both inside and outside of the country, the trade deficit of Japan in pharmaceuticals and medical devices is increasing (almost 2 trillion yen in 2011).



Requirement for a control tower promoting medical R&D comprehensively

(Establishment of Headquarters for Healthcare Policy and Japan Agency for Medical Research and Development)

- ⇒ The most suitable research funds can be ensured for researchers, consistently corresponding to the progress of the research from basic stages to practical application.
- ⇒ Effectiveness of the research can be improved by means of avoidance of overlapping investment for equipment and instruments through enabling their optimized allocation all around Japan.
- ⇒ Researchers can focus on research and development more than ever because of the reduction of paperwork by unification of the contact points and the procedures for applications.

Functions needed for Japan Agency for Medical Research and Development

Top-down research based on the Plan for Promotion of Medical Research and Development

Implementation of medical research and development

- Management by program director (PD) and program officer (PO), etc.
- Implementation of research along with the Plan for Promotion of Medical Research and Development. Understanding and investigation of research trends.
- Consistent management, such as selection of each research theme and management and advice for the progression of the theme, in order to transfer the outstanding results of basic research to clinical research and industrial use.
- •Enhancement of the PDCA cycle reviewing system.
- Concentration of the medical R&D funds to one funding agency.
- Monitoring and administration for proper implementation of research and development.
- Preventing improper use of research funding and malpractice in research.

 Developing the environment for complying with ethics, laws and regulations and guidance. Monitoring.

Improvement of the infrastructure for clinical research, etc.

- •Improvement and strengthening of Clinical Trials Core Hospitals, Early/Exploratory Clinical Trials Centers and Translational Research Centers.
- Support for allocating specialists, such as clinical research coordinators, data managers, biostatisticians, and project managers.
- •Improvement of biobanks, etc. in order to develop preventive medicine and service methods based on EBM*.

* EBM: evidence-based medicine

Support for industrialization

- Supporting research institutes in acquiring intellectual property rights.
 - A consultation window for intellectual property rights. Support for planning an intellectual property strategy.
- Cooperation with companies and support for cooperation aiming at practical use.
 - Planning and advising for exit strategies to promising seeds, cooperation with Pharmaceuticals and Medical Devices Agency (PMDA).
 - Providing information to companies, matching with companies.

Promotion of international strategy

- Supporting international joint research.
- Promotion of joint research based on international trends.
- Cooperation with overseas organizations that conduct medical research and development.

The main points of the Act on Promotion of Healthcare Policy

The purpose of this act is to create a society in which people enjoy long and healthy lives by promoting research and development that contributes to providing people with the top level of medical care in the world. [Article 1]

Headquarters for Healthcare Policy (HHP) [Article 21 through 29]

Roles of the HHP are:

- (1) To draft the Healthcare Policy and to promote its implementation.
- (2) To draft the Plan for Promotion of Medical Research and Development and to promote its implementation,
- (3) To make the Policies for Medical R&D Budget Allocation, and
- (4) To provide direction to the competent ministers when the ministers appoint the president or the auditors of the AMED and to set medium-term goals of the AMED.

The Healthcare Policy (Article 17)

The Prime Minister shall seek a cabinet decision on the Healthcare Policy, which consists of the following points:

- ✓ Promotion of medical R&D, preparation of R&D environment, and dissemination of the results of R&D
- ✓ Creation and vitalization of new businesses and industries including export of Japanese healthcare systems and medical equipment

The HHP shall develop a concrete plan for medical R&D, etc. in conformity with the Healthcare Policy



✓ Promotion of medical R&D, development of R&D environment and dissemination of the results

The Plan for Promotion of Medical R&D [Article 18]

The HHP shall make the plan which shall include the following points;

- Decision on important fields of medical R&D in which the Government should focus its resources
- √ Functions of the AMED that shall play core roles in implementation and in granting of medical R&D

The HHP shall propose a basic policy of the management of the business of the AMED based on the Plan for Promotion of Medical R&D.

Japan Agency for Medical Research and Development, independent administrative agency (AMED) General coordination regarding budget allocation etc.

Following HHS's order based on the Polices for Medical R&D Budget Allocation for each fiscal year, MEXT, MHLW and METI make appropriate fiscal arrangements for the AMED.

General coordination across the ministries

Relevant Ministries

Act on Promotion of Healthcare Policy (Provisional title)

In order to contribute to the formation of a society where citizens benefit from healthy lives and longevity, the State shall take the measures below:

- Formulation of the Healthcare Policy in order to comprehensively and systematically promote
 - Medical R&D that contributes to providing medical care at the highest level in the world
 - Creation of new industry activities which contribute to the formation of such a society
- Establishment of Headquarters for Healthcare Policy to promote the measures

Summary

1. General Provisions

- The purpose and basic principles of the act as well as responsibilities of the State

2. Basic Measures

- The State shall take basic measures as follows for (1) Promotion of medical R&D, improvement of the environment, and dissemination of outcomes,
- (2) Creation and vitalization of new industry activities as well as improvement of the environment in order to contribute to the formation of a society where citizens benefit from healthy lives and longevity.
 - Promotion of medical R&D and improvement of the environment
 - Securement of fair and appropriate operation for medical R&D
 - Enhancement of examination system of medicines for prompt and secure practical use of medical R&D results, and advancement of science with regard to the evaluation for the safety
 - Creation of new industries, facilitation of overseas development, promotion of education, and securing human resources, etc.

3. Formulation of the Healthcare Policy

— The government shall formulate the Healthcare Policy in order to comprehensively and systematically promote the basic measures.

4. Promotion of Medical R&D

- Headquarters for Healthcare Policy formulates the medical R&D promotion program in line with the Healthcare Policy, in order to intensively and systematically promote the measures of promotion of medical R&D as well as improvement of the environment and dissemination of outcomes with regard to medical R&D.
- Japan Agency for Medical Research and Development, an independent administrative agency, is positioned as a core institution for operation/grants in promotion of medical R&D and in improvement of the environment of the promotion program.

5. Establishment of Headquarters for Healthcare Policy

— In order to promote the Healthcare Policy, a Headquarters for Healthcare Policy (Director-General: Prime Minister, Members of Headquarters: Ministers of State other than Prime Minister) shall be established in the Cabinet.

Effective Date

- 1 and 2: The day of promulgation. 3, 4 and 5: the date specified by a Cabinet Order within three months from the day of promulgation

Function as control tower in medical research and development, etc.

Purpose of the Act [Act on Promotion Art.1]

The purpose of this Act is to contribute to the creation of a society where citizens benefit from healthy lives and longevity by prescribing healthcare strategy, establishing the Headquarters for Healthcare Policy to promote the strategy and taking other measures with regard to medical research and development and the creation and/or activation of healthy and active aging-related industries.

Basic Principles [Act on Promotion Art.2]

Measures shall be conducted in accordance with contributing to providing medical care with the world's top level of technology by promoting research and development consistently, from basic research to practical application, and bringing its results to practical use as well as contributing to the economic growth of Japan.

[Act on Promotion Art.17] The government shall prescribe the Healthcare Policy, with regard to basic measures, in conformity with the basic principle.

the Healthcare Policy (Cabinet decision)

- Outline of the Measures including for the medical research and development and the creation and activation of health and longevity-related industries that shall be taken by the government.
- Matters necessary for promoting measures above comprehensively and systematically.

Basic Measures (Act on Promotion Art. 10-16)

- Promotion of R&D consistent from basic research to practical use
- Arrangement of better environment for clinical research, etc.
- Fair and proper implementation of R&D
- Establishment of better examination systems, etc. for practical use of the results
- Creation of new industries and promotion of international deployment
- Promotion of Education -Securing human resources

[Act on Promotion Art.18] The Headquarters shall prepare the Plan for Promotion of Medical Research and Development in line with the Healthcare Policy.

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the Plan for Promotion of Medical Research and Development (Headquarters decision)

- The basic policy of measures that shall be taken by the government with regard to the research and development in the medical field, arrangement of a better environment, and dissemination of its outcomes (Measures for medical R&D, etc.).
- Measures for medical R&D, etc. to be taken in a focused and systematic manner.
- Any items necessary for promoting Measures for medical R&D, etc. in a focused and systematic manner.

[Act on Promotion Art.19] The Plan for Promotion of Medical Research and Development shall be prepared so that Japan agency for medical research and development may play a role as a core institution.

Roles of Japan Agency for Medical Research and Development

- 1) Implementation of R&D and arrangement of better environment in medical field (commissioned projects).
- 2) Dissemination and promotion for practical use of the outcomes originated from 1).
- 3) Subsidization for R&D and arrangement of better environment in medical field.
- 4) Supplemental operations for 1)-3).

Consistent research management on the top-down R&D from basic research to practical application under consideration to practical use-

Act on the Independent Administrative Agency of Japan Agency for Medical Research and Development (Provisional title)

The purpose of the act is to establish the Japan Agency for Medical Research and Development, an independent administrative agency, aiming to make the Agency carry out the operations of implementation/grants in promotion of medical R&D and in improvement of the environment, and is to prescribe the name of Agency, the purpose of its foundation, and the scope of its operations, etc.

Summary

1. Establishment of Japan Agency for Medical Research and Development, an Independent Administrative Agency

— In order to promote coherent R&D from basic research to practical realization, to smoothly put research outcomes to practical use in medical R&D, and to comprehensively and effectively implement medical R&D as well as improvement of the environment, the purpose of the act is to establish the Japan Agency for Medical Research and Development, an independent administrative agency, aiming to make the Agency carry out the operations of implementation/grant in promotion of medical R&D and in improvement of the environment, under the medical R&D promotion program that the Headquarters for Healthcare Policy formulates, and is to prescribe the name of Agency, the purpose of its foundation, and the scope of its operations ...etc.

2. The duties of Japan Agency for Medical Research and Development, Independent Administrative Agency

- 1) Medical R&D and environmental arrangement
 (e.g. In a contracted project, research regenerative medicine using iPS cells and prepare necessary research instruments for the research at Kyoto University)
- 2) Dissemination and promotion of effective use of the outcomes from the medical R&D and from environment arrangement (e.g. Introduce the outcomes of the drug discovery rudimentary research to pharmaceutical companies and facilitate practical use development)
- 3) Subsidization for promotion of medical R&D and improvement of the R&D environment (e.g. Subsidize processing technology of biotechnology-based drugs or improvement of clinical research system)
- 4) Related operations of 1), 2) and 3)
 (e.g. Survey of R&D or of technology development (domestic and international), public relation of research outcome, and global cooperation through research)

3. Involvement of Headquarters for Healthcare Policy

— When appointing a president and auditors and formulating medium-term goals of the Agency, competent ministers shall hear the opinions of Headquarters for Healthcare Policy.

Effective Date

— The day of promulgation (excluding some provisions). The founding of the Agency is scheduled for April 1, 2015.

The New System of Implementation of the Medical Strategy

Headquarters for Healthcare Policy (HHP)

The HQ shall

- develop a comprehensive plan for promotion of medical R&D.
- integrate medical R&D budget requests of relevant ministries.
- > strategically and intensively decide allocation of promotional adjustment funds.

Adopt agenda based on the comprehensive plan for promotion of medical R&D

Manage and integrate both allocated grants to researchers/scientists and institutions, and funding

X Integrate the budget for infrastructure development into a new agency

Integration of medical R&D budget requests

Researchers' bottom-up scientific research

Grant-in-Aid for Scientific Research (KAKENHI)

Smoothly transit discovered seeds

Japan Agency for Medical Research and Development

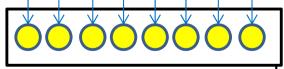
-- Nation's top-down scientific/clinical R&D

Infrastructure development

Clinical Trials Core
Hospitals etc.

Steadily implement clinical research/trials based on high international standards

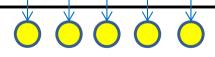
Funds for individual Research



W Universities, Institutions, Researchers/ Scientists Intramural research

National Institutions

Measure on source of revenue for Institutions

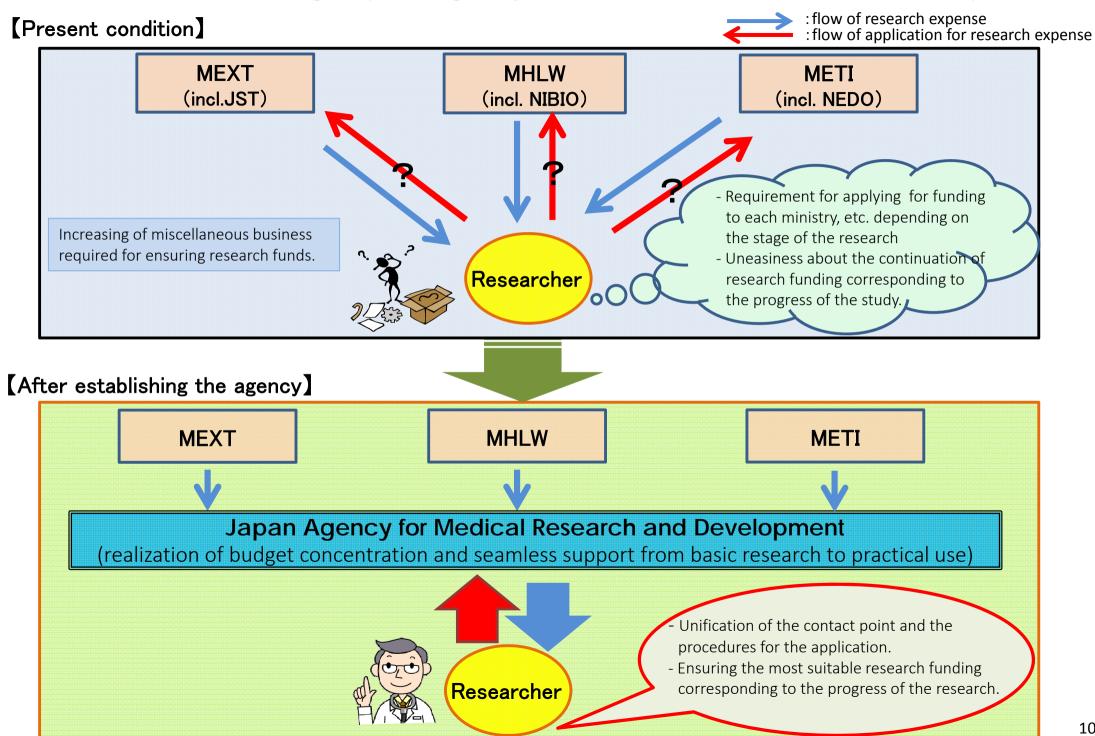


National Center for Global Health and Medicine, RIKEN, National Institute of Advanced Industrial Science and Technology, National Institute of Infectious Diseases etc.

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Implement research based on the comprehensive plan for promotion of medical R&D

Effects of establishing Japan Agency for Medical Research and Development



Budget Bill for Medical Research in FY 2014

1\$ = 100yen

	FY 2014	FY 2013			
New Agency	121.5 billion yen +20.3 billion yen +20.1% (MEXT57.0, MHLW47.6, METI16.9)	101.2 billion yen (MEXT44.7, MHLW40.2, METI16.3)			
Related Research Institutes	74.0 billion yen + 2.7 billion yen + 3.7% (MEXT20.0, MHLW45.5, METI8.5)	71.3 billion yen (MEXT15.5, MHLW47.6, METI8.1)			

MEXT: Ministry of Education, Culture, Sports, Science and Technology

MHLW: Ministry of Health, Labor and Welfare METI: Ministry of Economy, Trade and Industry

Cooperation Project among Related Ministries

For Drug Discovery and Medical Devices

Drug Discovery

25.4 billion yen

Medical Devices

11.2 billion yen

For the Most Advanced Medical Care

Regenerative Medicine (iPS cells, ES cells etc.,)

15.1 billion yen

Genomic Medicine

7.0 billion yen

For Clinical Research and Clinical Trial

12.1 billion yen

For Specific Diseases/Disorders

Cancer

17.2 billion yen

Psychiatric and Neurological Disorders

7.1 billion yen

Emerging and Re-emerging Infectious Diseases

5.3 billion yen

Intractable Diseases

9.3 billion yen

Next-Generation Healthcare Industry Council

Aim of the Council

- Ocreating and developing an industry to increase healthy life expectancy will contribute to improving quality life of the people, preventing excessive rise in medical expenses, creating jobs and promoting economic growth.
- O The council will endeavor to understand the situation of various products and services in health and longevity that the private sector provides, and analyze the issues and countermeasures from both demand and supply sides.

Business Environment WG Quality Evaluation WG Unitial issues to work on Council Investment in Health WG

OBusiness Environment Working Group

Investigate measures to improve business environment (e.g. system to remove gray zone areas) to create new healthcare-related services and products.

OQuality Evaluation Working Group

Examine quality evaluation for healthcare-related services and products.

OInvestment in Health Working Group

Investigate ways to promote investment in health by companies and individuals.

Examples of services that Next-Generation Healthcare Council aims to create

Objective of Healthcare Council is to foster creation of diversified evidence-based healthcare service (outside public insurance), such as effective disease prevention, health monitoring, and life support service related to illness. Through such initiatives, the Council will contribute to realizing a society where people can live in better health (health and longevity-oriented society).

Medical Institutions Private Operators

Medical Institutions and private operators will cooperatively provide evidence-based healthcare services to the Grav Zone to satisfy patient needs

Private Operators (1st layer) gym, meals, beauty, pharmacies, CVS, temporary staffing, taxi, housekeeping,

housing, travel agencies, etc

Private Operators (2nd layer) agriculture, logistics, IT, real estate, training, manufacturing

Medical Service





Dietary

counselling

Next-Generation Healthcare Service

Tertiary prevention Secondary prevention

supply

Primary prevention Exercise instruction

Health monitoring









longevity -oriented society

health

and

supply

Insurer **Municipals** Individuals

Utilize proactively in preventing disease worsening





Patient

mental

support

housekeeping

housing

demand

supply

work

Technologies and services required for

transit

innovation in healthcare services

Agriculture, Logistics, Information Systems, Real Estate, Personnel Training, Manufacturing

Low

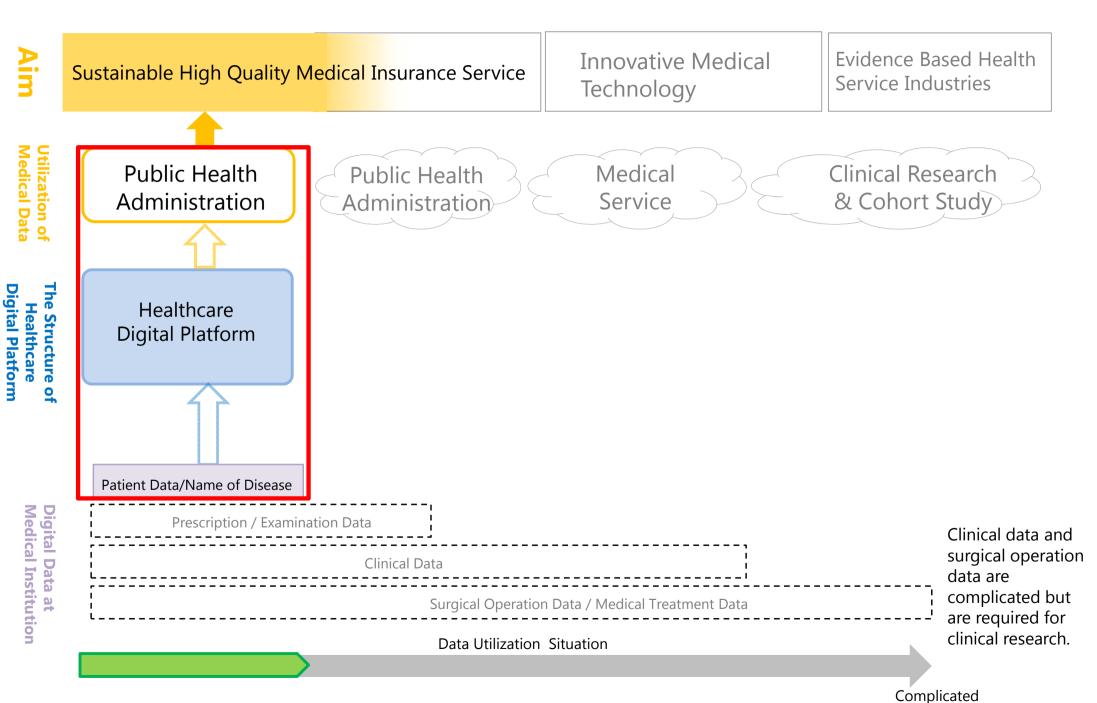
High

Relevance

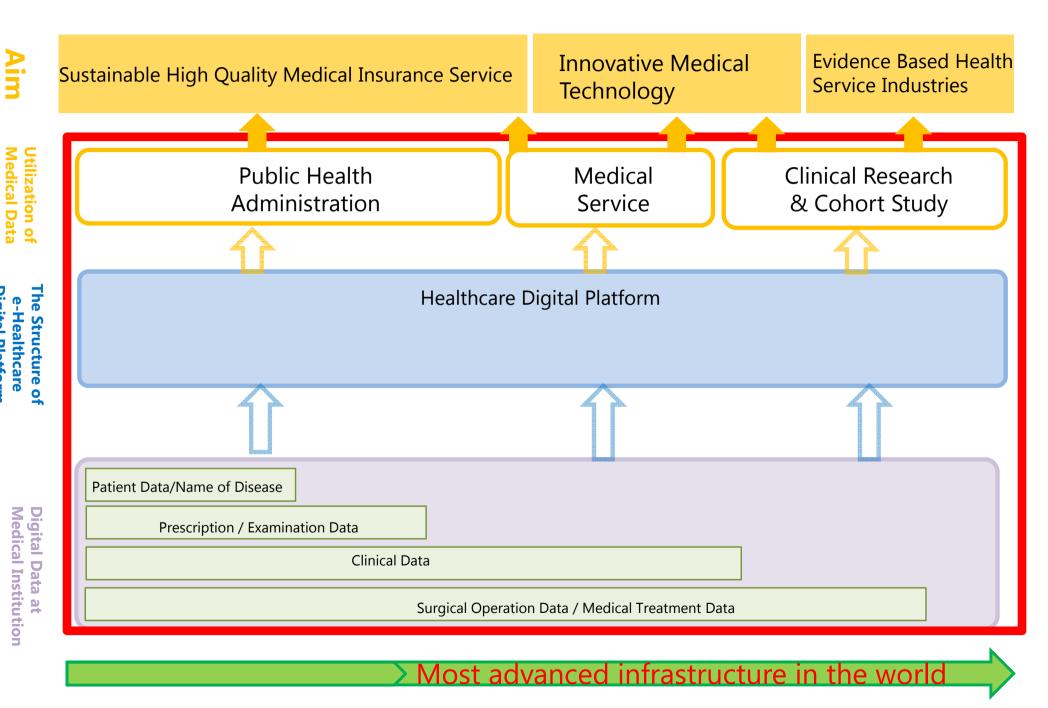
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Medical Care

Utilization of ICT for Healthcare



Future Vision for ICT Utilization for Healthcare



Digital Platform

Promoting global deployment of Japanese medical services



Exporting medical services as a business

Universal Health Coverage

Emphasis on ensuring access to health services for all people at a price they can afford, utilizing ODA funding

Investment/lending

Financials support for feasibility studies

Matching/networking















ODA related funding and others

- Improve health situation and create economically expanding market locally
- Enhance Japanese credibility and contribute to Japanese economy

Projects to promote global expansion of medical services

						Factors planned					
Area •operation	Country begun •:for	Projects Tming consortium •investigating	Status	Project MOU/ Agreement	G to G MOU*	Overseas base for medical service	Train personnel	Health system/ standards	ICT remote medicine	Area infra.	
Russian Far East	Russia	Hokuto Image Diagnosis Center (Vladivostok)	operation begun	signed	negotiating	0	0		0		
Southeast Asia	Bangladesh	•Image Diagnosis Training Center (Dacca)	operation begun	signed			0				
India	India	•SAKRA World Hospital (Bangalore)	operation begun	signed	negotiating	0	0				
West Russia	Russia	Advanced Medicine Center (Moscow)	:forming consortium	signed	negotiating	0	0				
Southeast Asia	Cambodia	 Emergency and Critical Care Center 	:forming consortium	signed	signed	0	0	O Private insurance	0	0	
Central Asia	Kazakhstan	Cancer Diagnosis Center	:forming consortium	signed		0	0		0		
Southeast Asia	Laos	 Emergency Care and Training Center (Vientiane) 	:forming consortium		signed	0	0	O Private insurance			
Middle East	Qatar	 Reproductive Medicine and Cell Sheet Center 	investigating		negotiating	0	0				
Middle East	Kuwait	 General Hospital and Training Center 	investigating			0	0				
Southeast Asia	Myanmar	Emergency Care and Training Center	investigating		signed	0	0	O Private insurance			
Southeast Asia	Bhutan	Medical University	investigating			0	0	0	0		

^{*} Government to Government MOU with MOH has also been signed with Vietnam, Turkmenistan, Bahrain and Turkey and is under negotiation with Brazil and Malaysia

What global expansion of medical services means to Japan



Positive cycle for developing innovative technology (e.g. regenerative medicine)

 Population will decrease in Japan, and there may not be enough treatment cases to conduct clinical trials or to improve technology

Progress in securing pharmaceutical products for children

 Birthrate is declining and it may be difficult to develop products for children as cases are decreasing